

**POLITICAL STRATEGIES AND DOMESTIC ECONOMY OF THE LOTE B RURAL
ELITE IN THE PREHISPANIC LURÍN VALLEY, PERU**

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University of Pittsburgh, 2012

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University of Pittsburgh, 2012

There is a long tradition in archaeology that focuses on the study of societal intermediate groups as a way to understand how broad regional political transformations intermingle with different local settings. This dissertation explores this topic at the rural Lima Culture site of Lote B (Cerro Manchay) in the Lurín Valley. This site was occupied from the Early Intermediate to Middle Horizon period (circa 500–700 CE), a time of dramatic regional change. My research identified the main power strategies at work in the site, the constituent factors of these power strategies and how they were re-arranged by Lote B inhabitants at the start of the Middle Horizon period. The analysis has illuminated the transformation of power strategies of Lote B inhabitants in both domestic and monumental context.

In order to develop a better understanding of Lote B inhabitants' political strategies, test pits in midden deposits, complemented with limited broad excavations inside the architecture were undertaken at the four constituent sectors of the Site. The results of this investigation revealed an elite domestic compound occupied in the Early Intermediate and lasted through the Middle Horizon Period. This domestic compound was later co-opted by the Late Lima multi-valley polity through the construction of two non-domestic buildings, one of them a storage facility that was constructed on area previously used as burial grounds. Other transformations like the increase in feasting activities, more storage structures and better quality of architecture in

the residential complex, suggests that these elite maybe benefited from an economical improvement with their inclusion into this regional polity.

My results detail a case of what I believe is a common integrative process in the formation of regional-level polities: that intermediate elites are willing to trade independence of action for favored economic agendas, when this are likely to solidify their political position. In short, the regional transformation associated with the spread of the state, allowed local elites to change their relationships with commoners.

A Lucille, lo que yo, simplemente soñé

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1.0 FROM LOCAL LEADERS TO RURAL ELITE IN THE LIMA POLITY

1.1 INTRODUCTION

The understudied Lima culture of the Peruvian central coast offers an important context for researching significant sociopolitical change in Andean prehistory. There is compelling evidence for a sociopolitical transformation in the area between AD 550 – 650, perhaps even the development of state-level society (Dillehay 1976, 1979; Kaulicke 2000; MacNish et al 1975; Patterson et al 1982, Earle 1974; Shady 1982, 1988, Conlee and Ogburn 2004:6). It has also been suggested that interaction with the Wari empire played a role in these changes. Other researchers have stressed the importance of ritual practices as the basis for rapidly developing structures of social authority, citing the construction at this time of monumental temples at the site of Pachacamac, in the Lurín Valley. Still other scholars have pointed to a rise of a political economy built on mobilized agricultural surplus.

However, virtually nothing is known about political organization at the community level. My research studied local or intermediate elites at the small, rural, Lima culture center of Lote B in the Lurín Valley, a site occupied through this period of dramatic change. Was the increase in political centralization seen at the regional level concomitant with the emergence of a new political order at the community level? Mapping and excavation in domestic and public areas of the different sectors of the elite residential site generated data on the development of the site, and

the activities that took place there. This data in turn, made it possible to identify changes through time in the nature of Lima social leadership, and in the role of rural, intermediate elites in the Lima polity. With such information, it becomes possible to evaluate the extent to which Lima elite political strategies, outside of the monumental centers, rested on staple production, craft production, ceremonial practices, external contacts, or emulation of Wari elites.

1.2 POWER STRATEGIES IN THE PREHISPANIC ANDES

The extensive literature dealing with the foundations of social authority and political power, includes several treatments focusing on the Andes (eg: Costin and Earle 1989; D'altroy 1992; Goldstein 2000; D'altroy and Hastorf 2001; Haas 2001; Hastorf and D'Altroy 2001; Stanish 2001; Isbell and Silverman 2002; Janusek and Kolata 2004; Vaughn, Ogburn et al. 2004).

Drawing from this literature, one can for analytical purposes divide the power strategies at the base of political leadership into two broad categories (Vaughn 2006): strategies based in economic factors and strategies based in social prestige. Whether conceptualized in terms of agency models, group-oriented vs individualizing polities, or corporate vs network constructs, or corporeal vs non-material powers, most archaeologists agree that even while these strategies frequently co-occur in many complex societies (elites are both economically and ideologically privileged), there are many axes of leadership or political power, and in any particular setting, some strategies will be more important than others (DeMarrais, Castillo et al. 1996). Hence the importance of “disentangling” these strategies for individual societies in contexts of cultural change, evaluating the relative import of each, and exploring the ways in which these strategies work together.

In economic strategies, power and social privilege are associated with domination over key resources such as agricultural products, over the production of craft goods, or over the movement of exotic, prestige items (D'Altroy and Earle 1985; Brumfiel and Earle 1987; Costin and Earle 1989; Cobb 1996,2003; Haas 2001; Vaughn 2006) . The indigenous Andean world also offers examples of societies in which leadership and social status were not closely linked to control of surplus or wealth accumulation. Ideology is a common (non-economic) basis for high status and social authority, with elite legitimization resting on domination of ritual production, communal ceremonial practices, and/or positions within hierarchical kinship systems (Conrad and Demarest 1984; DeMarrais, Castillo et al. 1996; Goldstein 2000; Schortman, Urban et al. 2001; Janusek 2006). Materially, elites in these societies may be recognizable through their greater extra communal ties to distant, esoteric lands, their adoption of the symbols and behaviors of neighboring elites (Helms 1979; Goldstein 2000; Jennings and Yepetz 2001; Bawden 2004; Vaughn 2006; Jenning 2010), or their greater involvement in communal ceremony (including public funerary practices). In societies in which status rests mainly on prestige strategies alone, elites are likely to be prestigious without being wealthy (that is, without displaying significant material privilege).

Of particular relevance for the prehispanic Andes are partial prestige systems in which social power lay more in the ability to mobilize people or factions, rather than mobilizing objects directly. These systems can also lack strong economic differentiation, as leadership lies in manipulating social relations rather than economic processes. Political economy is built around the ability to command labor, not control of production or wealth accumulation. Leadership and status elevating activities in these strategies are likely to be manifested in feasting, offering activities, and expressions of reciprocity (Costin and Earle 1989; Cook and

Glowacki 2003). In kin-based societies, we might expect to see these activities (ceremonial and otherwise) at regional centers, in corporate/communal undertakings, and in forms of ancestor veneration (Isbell 2004).

As Conlee and Ogburn (2004: 1) note, “the study of power bases and ways in which they are used by individuals, factions and other social groups is germane to understanding the development of sociopolitical complexity (generally).” Periods of societal-wide change are particularly fruitful for investigating how power is created, dialectically, between agents and the opportunities and constraints of tradition, existing institutions and/or other actors surrounding them (Miller and Tilley 1984; McGuire and Saitta 1996). Examining power as practiced by social actors, focuses attention on the activities performed by leaders, and on the ways that agency may be realized in economic, ideological, social, and ceremonial realms

1.3 STUDY OF INTERMEDIATE ELITES IN ANDEAN ARCHAEOLOGY

Intermediate elites can range from state officials, to minor members of the ruling nobility, to local leaders who, through conquest or voluntary affiliation, become intermediate in standing between the commoners below them, and the primary authorities above. Intermediate elites are particularly fitting for archaeological study because they often stand at the, “nexus of individual and institution,” (Conlee and Schreiber 2006:96) and their actions manifest the relationships that vertically integrate polities.

There is a long tradition in Andean archaeology, as elsewhere, in study of intermediate elites in their “middlemen” capacities (Chase and Chase 1992: 12, Stanish 2000), as a way to understand how large polities were managed or expanded. In this focus on elites as part of

administrative hierarchies, particularly for state level societies, a central concern is how intermediate elites operated as key elements in the functioning of the polity (e.g. Mackey 1987; Costin and Earle 1989; Chase and Chase 1992; D'altroy 1992; Schreiber 1992; Saitta 1994; McGuire and Saitta 1996; Morris 1998; Covey 2000; Dobres and Robb 2000; Drennan 2000; Schortman, Urban et al. 2001; Sinopoli 2001; Stanish 2001; Conlee 2003; Topic 2003; Conlee and Ogburn 2004; Porter 2004; Elson and Covey 2006; Wernke 2006).

Some of the most effective examples of this approach are the studies of provincial variability in state administration (such as the Wari and Inca empires) that relate the nature and roles of intermediate elites to issues of how central authorities can cost effectively govern through subordinates (D'altroy 1992; Schreiber 1992; Covey 2000; Brumfiel 2006; Morris and Covey 2006). The mosaic of possible outcomes that are a product of this internal variability range from direct, territorial and high cost administration, to more indirect, hegemonic and low investment forms of authority (D'altroy 1992; Schreiber 1992; Covey 2000; Morris and Covey 2006). In this view, the power of intermediate elites comes increasingly to be derived from participation in the state system, as intermediate elites take on the role of supervising commoners on behalf of the state (Covey 2003: 349; Topic 2003:244).

In recent years, these approaches have been heavily (and sometimes unfairly) criticized as too “top down” and too static. One criticism is that the focus on administrative integration lends itself to portrayals of prehistoric societies as monolithic entities (Stein 2005; Wernke 2006). A second criticism is that these approaches tend not to recognize that intermediate elites may be in competitive or adversarial relationships with ruling elites. Conlee and Schreiber (2006), for instance, have argued that Wari conquest of local Nasca leaders in the Middle Horizon 1 and 2 Periods led to the emergence in the Nasca Valley of two kinds of, co-existing, intermediate-elite

agents: those who derived their power from cooperation with the Wari state, and those who were powerful because of their opposition to Wari domination. As Conlee and Schreiber (2006:95) point out, new intermediate elites have to balance their positions in an over-arching system with, “with maintaining their local supporters and regional alliances.” Therefore, in some cases, “a great deal of restructuring occurs when a state co-opts local leaders into their power structure,” (Conlee and Schreiber 2006:95), while in other cases this does not happen. Intermediate elites have to negotiate power strategies that can draw on state and local power bases. In fact, intermediate elites may arise to function more as a “buffer” between a community and a state, rather than as agents of the state.

The third and related criticism is that the administrative models tend to explain local social change as a consequence of external influence, relegating the local sociopolitical order to possessing only a reactive capacity (Goldstein 2000). While conquests or collapse may have presented elites with new opportunities to shape local political structures, there is no reason to believe that local elite political strategies would be less dynamic without these sweeping over-arching transformations. Local authorities could choose to negotiate, resist, accept and manipulate relationships with the state, and be active agents in the construction of new political orders (Goldstein 2000; Stein 2005; Dillehay, Williams et al. 2006). When thought of in this way, modeling the actions of intermediate elites means taking a somewhat different perspective, for example examining how participation in aspects of the state system (or minimization such participation) increased the material/power rewards to local elites.

Such an approach in the Andes is exemplified by Vaughn’s work at the Early Nasca village of Marcaya (Vaughn 2004, 2009). All households at this small, rural site had access to some Nasca polychrome pottery, likely produced at the monumental center of Cahuachi. However,

two higher status households (patio groups X and XII) displayed higher proportions of this pottery, and were the only households at the site with access to headjars, pan pipes, and other “high status” vessel forms such as effigy vessels and cup bowls (Vaughn 2009: 155). These elite households exhibited the same range of domestic activities as other households at the site, but differed in their larger patio size and higher quality domestic architecture. Vaughn argues that a significant prestige-building strategy of these wealthy elite was in the local redistribution through feasts and communal ceremony, of ideologically-charged Nasca polychrome pottery (Vaughn 2004, 2009: 161). This pottery, obtained through elite pilgrimage to Cahuachi, was then used to replicate Cahuachi ritual at smaller scale in the villages, materializing Nasca ideology for commoners, “to maintain the relationship between distant ritual and supracommunal sacred settings and the dynamic, localized social order” (Silverman and Proulx 2002: 264). In this case, essential power strategies of the Marcaya intermediate elites were the emulation of Cahuachi primary elites (in some ritual practice), and acting as a conduit for the central ideology.

In sum, recognizing that intermediate elites are enmeshed in relationships between what is “above” them and what is “below” them (Tung and Cook 2006: 69), they have the task of fulfilling their own agendas, maintaining their social privileges, at the same time dealing with new political opportunities and challenges (Elson and Covey 2006)

1.4 FROM LOCAL LEADERS TO INTERMEDIATE ELITES IN THE LURÍN VALLEY

In general, the Early Intermediate Period (200 BC - AD 600) of the central coast of prehispanic Peru provides an excellent framework for exploring intermediate elite power strategies. This

period was, “characterized by the emergence of multivalley regional polities or states such as the Moche, Nasca, Lima cultures” (Conlee and Ogburn 2004: 6). Too, it was a period in which art, sumptuary goods, religion and performance become highly expressive of “ideologies of power.” These belief systems were used to, “naturalize the relations of dominant class over less potent social groups” (DeLeonardis and Lau 2004), allowing elites to sustain their privileges even in systems of limited political coercion or limited centralized political institutions.

More specifically, the Lima culture is a promising subject for studying intermediate elite dynamics. Firstly, there is sufficient information to recognize a sociopolitical transformation in the Lima culture between AD 550 – 650, including the development of state level political organization. As of yet, we can only sketch this development in the vaguest of ways. As DeLeonardis and Lau (2004:94) have noted, “the interpretation of the sociopolitical implications of Lima culture remains at a nascent stage.” Secondly, with the expansion of the Lima culture into the Lurín Valley in the Late Lima phase, this is a case in which local leaders did become intermediate elites, with sites like Lote B becoming third or even fourth-order sites in the Lima settlement hierarchy, below such centers as Pachacamac and Maranga. Thirdly, the archaeological record of the Lima culture area in the 5th – 8th centuries AD, allows us to consider how intermediate elite strategies related with two strikingly different configurations of power, in the form of the sanctuary/ceremonial center of Pachacamac, and in the expansive Wari conquest state.

Drawing from the above theoretical discussion of power strategies and intermediate elites, it is possible to highlight five common issues or themes of particular interest in understanding how the Lote B inhabitants as intermediate elites.

(1) Emulation is a widespread strategy of intermediate elites. Was one of the power strategies of Late B elites that of emulation of primary or non-local elites? In moving (voluntarily or involuntarily) from local leaders to intermediate elites, these individuals enter an over-arching status order and authority structure, and may draw on this in power-building activities. A relevant Andean example can be found in the Cotahuasi Valley, to the south, where the late pre-Middle Horizon period also exhibited intensification of agriculture, increases in political hierarchy and social stratification, and adoption of Wari-related stylistic preferences. Here, researchers have recently argued that local leaders adopting non-local styles and activities, as they became articulated within a regional elite culture (Jennings 2006; Jennings and Yopez 2001).

(2) Intermediate elites often serve as conduits of ruling ideology, or purveyors of the Great Tradition to subject, local populations, as in the Marcaya case (Vaughn 2009).

(3) New intermediate elites often use the circumstances of regional shifts to significantly change their own local-level political economy. A common outcome of such a change is greater local elite involvement in staple finance strategies. This shift may be because the politics of which the local elites and their subjects are now part have higher “overhead” than the political system that existed before. Or, perhaps because it is easier for intermediate elites to justify mobilizing surpluses for “a higher cause,” than it would be for local elites to do so for their own direct benefit.

(4) Redistribution of materials associated with primary elites is an important intermediate elite strategy. These materials may be high value craft goods, or highly ideologically-charged items, that intermediate elites acquire by virtue of their social position or wealth. Such materials

can be used in faction building, to stimulate staple production, and to demonstrate the elites' special relationship to powerful institutions or esoteric realms.

(5) Intermediate elites have “three faces: “ one presented locally to commoners, another to other intermediate elites, and the third to primary elites. Of these three relationships, the hierarchial ones - - above to primary elites and below to commoners - - are most relevant in the Lote B case. An important consideration in distentangling intermediate elite power strategies is examining how these strategies, above and below, relate which each other. Are the actions of the intermediate elites toward the groups above and below interconnected, similar or are they are independent? One possibility is that becoming intermediate elites involved them in regional power-building strategies that they already used locally before. Alternatively, interaction with primary elites and their institutions may have led intermediate elites to duplicate these strategies locally. A second scenario is one in which intermediate elites engage in different but related strategies on these fronts. So, for example, their local strategy may involve domination of local ritual activities with highly iconographically-charged ceremonial items, while their regional relationship with primary elites is articulated through circulation of these items. Finally, the above and below power strategies may be in different realms all together, so that what the intermediate elites are doing in negotiating position in the regional arena has little or no relation with the strategies used toward creating power in the local community.

2.0 THE LIMA CULTURE AND LOTE B

This chapter places the Lote B site in regional and chronological context, and reviews the current discussions on the organization and dynamics of the Lima culture political system. The fieldwork at Lote B site is briefly described at the end of the chapter, along with the research questions that guided the research.

2.1 LIMA CULTURE

What is known as the “Lima culture” is a long ceramic tradition that lasts at least six centuries, and spread over the Peruvian central coast. The extent to which a political entity corresponds to this ceramic tradition is still a matter of debate, but the known settlement hierarchies among sites sharing this ceramic tradition indicate that the Lima culture roughly corresponds to a political formation. How this formation was integrated is part of the subject of this research. Most archaeologists familiar with the Lima culture recognize that the Lurín Valley was the southern border for Lima style distribution (Gabe 2000; Angeles 2008: 104). To the north, Lima style pottery and other attributes are found as far away as the Chancay valley (Kaulicke 2000). To the east, Lima materials extend up valley, into the intermediate elevation area between the lower and middle valley known as the Chaupi-Yunga (Kaulicke 2000; Marcone 2010), although several ceramics in Lima style have been reported in higher altitudes (Kaulicke 2000) (fig. 2.1).

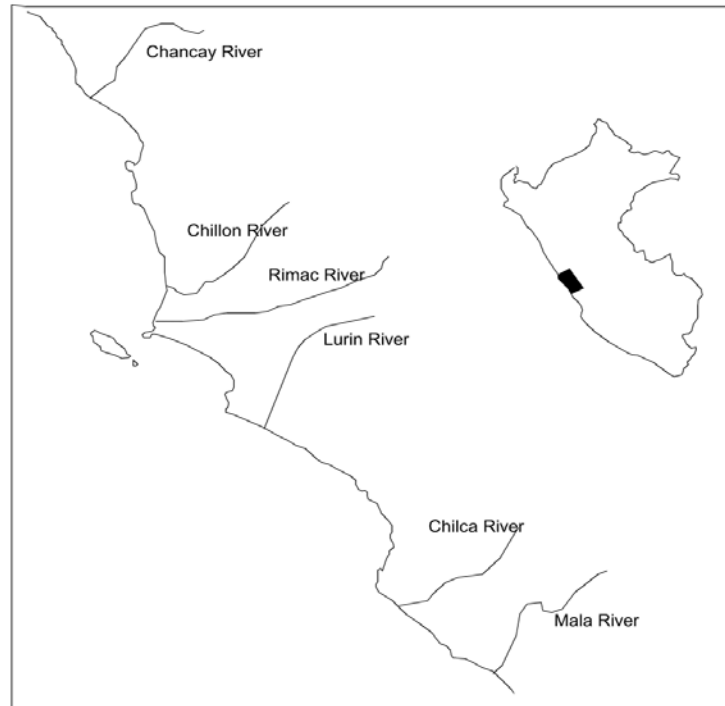


Figure 2-1 Valleys of the Peruvian central coast

From the foundations of Andean archaeology (Uhle 1903; Burger 1989; Schaedel 1993; Rowe 1998), the study of Lima culture has overwhelmingly centered on stylistic analysis aimed at determining the distribution of the style, and at developing stylistic sequences. From early on, the spread of the Lima culture had been equated to the spread of the distinctive tricolor ceramic style (Lima style), although other “traits” that have been treated as diagnostic Lima culture attributes. For example, a “classic” characteristic of the Lima culture was the utilization of small, hand-molded, mud-bricks in the construction of buildings and compounds, some of them monumental. This is a very distinctive architectural characteristic, unique to the central coast during the Early Intermediate Period. Although not all Lima culture buildings were built with little-mud bricks, all the buildings built with little mud bricks are associated with Lima style pottery. Another distinctive Lima culture was burial of the dead in an extended position, wrapped in cane and on a cane litter.

The monumental constructions in the Lima culture area are comparable and contemporaneous with monumental buildings in other areas of the Andes, such as the Moche, Nazca or even Wari. Several of these monumental sites associated with the Lima culture were among the first systematically excavated sites in Peru (Uhle 1903, Kroeber 1926, Stumer 1953, Strong and Corbett 1943, Willey 1943, 1945, 1951). The most famous of these monumental sites are Playa Grande and Cerro Culebras in the Chillón Valley, Maranga and Cajamarquilla in the Rimac Valley, and Pachacamac in the Lurín Valley. Other important sites and centers include Huaca Pucllana, Huaca San Borja and Vista Alegre (Fig 2.2).

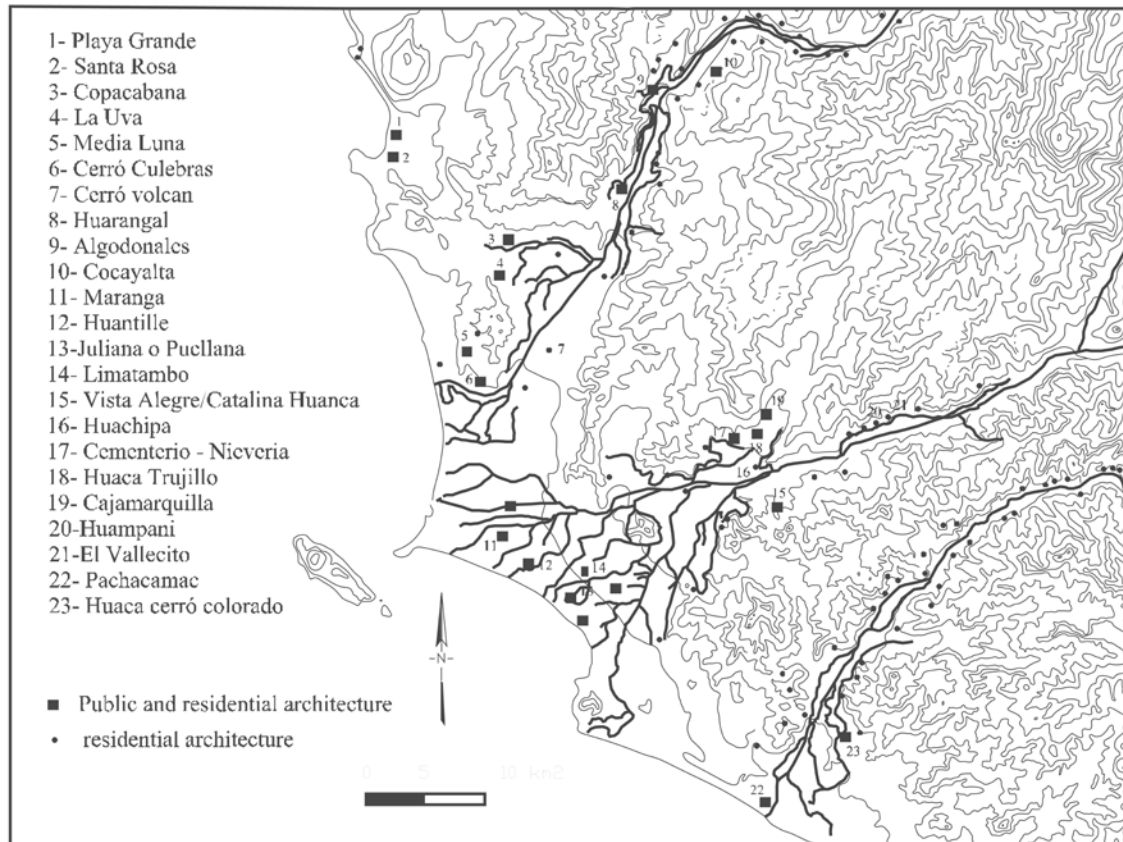


Figure 2-2 Peruvian central coast and Lima sites redrawn from (Patterson et al 1982, Agurto Calvo 1984; Narvaez 2006)

2.2 PREVIOUS RESEARCH ON THE LIMA CULTURE AND IN THE LURÍN VALLEY

The archaeological recognition of the Lima culture begins with the pioneering work of Max Uhle in Pachacamac (Uhle 1903, Shimada 1991; Schaedel 1993; Burger 1989; Rowe 1998). Based on materials recovered in Pachacamac, Uhle posited the existence of a society that he called “proto-lima” as an antecedent of the greater civilization of Tiahuanaco in the “Lima” region.

Following this, the history of the study of the Lima archaeological culture can be divided into four periods, each distinguished by then-current theoretical notions, research agendas, and favored archaeological lines-of-evidence (Table 2.1). A detailed historiography of the Lima culture can be found in the work of Peter Kaulicke (2000), Huayta Montoya (1995), Rafael Segura (2004). The only review of Lima culture published in English in the last 50 years is DeLeonardis and Lau 2004.

Initially, during what I call the “proto period of Lima research”, the Lima culture was identified as an independent cultural development of the central coast, and its temporal position assigned to the pre-Tiahuanaco epoch (ex. Uhle 1903, 1926; D’Harcourt 1922, 1924). In the second period of Lima investigation, archaeologists (ex. Strong and Corbett 1943; Strong 1925; Kroeber 1926, 1954; Stumer 1953; Willey 1943; Jijon y Caamaño 1949; Tabio 1957) subdivided this societal development into “two phases,” using a number of different names such as Playa Grande, Interlocking, Proto Lima, Maranga. The stylistic criteria for these divisions never were clearly defined, and the use of multiple terms generated confusion, and made inter site comparisons more difficult (Patterson 1966; Flores 1981; Montoya 1995). In 1953, during the “Terminology Round Table of Peruvian Archaeology,” researchers working in the area agreed to use the designations Playa Grande and Maranga as the names for the early and late phases of the

Early Intermediate Period ceramic styles on the Peruvian central coast (Escobedo and Goldhausen 1999, Fernandez 1960). Although this distinction was made solely on the basis of changes in stylistic preferences, researchers assumed that the stylistic division somehow corresponded to two socio-cultural phases. Characteristically for Andean archaeology at the time, there was little discussion of how Lima society actually differed in these two phases.

Period	Archaeologists	History	Influence	Type of Society	Basis Social Change	School/ Tradition	Areas
Proto-Period	Uhle D'Harcourt	1898 Pachacamac Project	External	Civilization/ Barbarie Nations	Diffusionism	Cultural history	Pachacamac Chancay Valley Nieveria
Two Phases Period	Kroeber Willey Strong Jijon- Caamaño Stummer	Uhle's Pottery Collection - 1925,1926 Round table 1953	Strong Local	Cultures	Religion- Ritual "Ideology of Power"	Cultural History - Cultural sequence-	Ceramics Rimac Valley Chillon Valley Chancay Valley Pachacamac
Nine Phases Period	Patterson Sistieri Guerrero y Palacios Agusto Calvo Dillehay Franco y Paredes	Patterson 1966	Foreign Influence	State Formation?	Religion - Ideology ↓ Economic control	Processual Marxism	Rimac Valley Chillon Valley Pachacamac
Three Phases Period	Segura Falcon Mogrovejo Crespo Kaulicke Goldhausen	Boletín PUCP 2000 →	Strong Local	State, Polity	Religion → Economy Economy → Religion	Iconography	Rimac Valley Pachacamac

Table 2-1 History of Lima Culture Archaeological research

In his 1966 dissertation, Thomas Paterson (1966) recognized that these two stylistic phases were too long to be useful in describing societal change, arguing that they, “reflect chronological differences only in the most general way” (Patterson 1966: 1; Dunn 1979). Patterson replaced them with finer grained relative ceramic chronology that used nine phases (Patterson 1966:3). Patterson developed a seriation of Lima ceramics after collecting sherds from different sites in the Chillón, Rimac and Lurín valleys. Some of these materials had stratigraphic associations, which gave him a relative temporal structure for the nine phases (Patterson 1966: 1). Patterson additionally sought to relate his Lima phases with John Rowe’s master sequence for the whole Andean region, locating the beginning of the Lima sequence around Epoch 2 of the Early Intermediate, and the last phase of Lima phases between Epoch 6 (Early Intermediate) and the beginning of the Middle Horizon (Patterson 1966; Earle 1972: Table 1; Dunn 1979: 168). By the beginning of Epoch 1B (Middle Horizon), the Lima was abandoned or transformed into a “new” style (Nieveria) that mixed local and Wari elements, and indicated the presence of the Wari polity in the area (Menzel 1964; Patterson 1966; Kaulicke 2000; Segura 2004).

This scheme – still based largely on changes in pottery decorative preferences – served as the chronological framework for the study of the Lima culture for more than 40 years. Most archaeological investigations of Lima sites after 1966 aimed at refining this chronological sequence. Subsequent excavations at Lima sites showed that although Patterson’s phases might be useful in a very general for capturing stylistic variability, their chronological value had to be re-evaluated, and the his sequence suffered from inadequate sample sizes and biases in the collecting (Segura 2004). For example, a number of investigators are finding pottery of the last three phases co-occurring with Nieveria style sherds, indicating that these three last phases and

Nieveria are contemporaneous (ex: Guerrero and Palacios 1994; Montoya 1995; Kaulicke 2000; Mac Kay and Santa Cruz 2000; Mogrovejo and Segura 2000; Ccencho 2001; Segura 2001; Narvaez 2006).

Since the year 2000, Lima archaeological studies have seen a relative re-birth (ex. Rios and Ccencho 2009, Segura 2001, 2004, Segura and Shimada 2011, Shady 2000). Part of this re-birth stemmed from the agreement among researchers that the Patterson sequence was an overly sub-divided one that didn't work when confronted with stratigraphic evidence. Too, researchers began to see the desirability of less restricted chronological divisions that would be based not solely on stylistic shifts, but on changes in the archaeological record as well. Currently, a three phases (Early, Middle and Late) scheme is used in study of the Lima culture (Montoya 1995; Kaulicke 2000; Goldhausen 2001; DeLeonardis and Lau 2004: 94; Segura 2004: 107 -108).

2.2.1 The Lima Ceramic Style

The Lima decorative style is relatively uniform. Lines, bands, rings, and dots, in black, white, and red, are used in creating designs or motifs labeled the “interlocking complex” (Falcon Huayta 2003). The principal element in this complex is a bi-headed serpent (also known as the “classic interlocking motif,” (Patterson 1966; Falcon Huayta 2003). Other figures in the repertoire are the so-called “Octopus” and the “Smiley Mouth” (Escobedo and Goldhausen 1999) (Fig. 2.3).

In the Late Phase, decoration becomes more simple and figurative, and the zoomorphic elements disappear. Ceramic decoration is dominated by triangles, points, and geometric designs interwoven around each other, but not forming recognizable figures (fig 2.4).



Figure 2-3 Vessels in Middle Lima style



Figure 2-4 Vessels in Late Lima style

2.2.2 Lima Settlement Patterns

The Lima archaeological record is under constant pressure from the expansion of modern urban Lima. A consequence of this urban pressure is that Lima culture archaeological research has focused on monumental buildings and burials. In the effort to rescue these more “valuable” sites, investigation of more humble contexts, like domestic sites, has been set to one side. Despite this situation, a handful of helpful studies (each by itself incomplete or poorly published) have been done that provide regional settlement information for the Peruvian central coast during the Early Intermediate Period to the beginning of the Middle Horizon.

2.2.2.1 Chillón Valley

The most comprehensive settlement study for the Chillón valley to date was conducted by Jorge Silva for his PhD dissertation (Silva 1992; Silva 1996). Silva identified 10 (Media Luna, Cerro Culebra, Copacabana, La Uva, Huaca Santa Rosa, Huarangal, Algodonales, Coyalta, Pv46 - 923,924, Playa Grande) sites with monumental architecture from the Early Intermediate period in the lower part of the Chillón valley. These sites present a combination of public buildings and residential areas (Agurto Calvo 1984; Silva 1992; Paredes 2000; Falcon 2001). Silva also recorded sites in the lower part of the valley that have only residential components (Silva 1996). These sites take the form of relatively nucleated villages of domestic structures, and in this way clearly differ from the domestic pattern defined for the Chaupi-Yunga (the buffer zone between the coastal lower valley and the middle valley, with more highland-like cultural and ecological characteristics). In the Chaupi-Yunga, Silva recorded a pattern of very small, dispersed hamlets, with settlement located mainly on the edge of the valley floor, or on the hill slopes overlooking the river. The location of these domestic sites followed the course of the river in a linear pattern,

and reflected an agrarian subsistence strategy dependent on the alluvial plain of the river (Silva 1996: 153)

Silva (1992; 1996) found that sites from the lower valley yielded ceramics of all the phases of the Patterson sequence, while sites in the Chaupi-Yunga region only displayed the latter part of the sequence, suggesting a progressive expansion of the Lima culture population into the peripheral areas of the Chaupi-Yunga. Initially, this peripheral zone lacked evidence of political hierarchy or centralized polities, but by the end of the Lima sequence, Silva argues, the population had been integrated into the more complex political organization of the lower valley (Silva 1992; 1996).

In proposing that the lower valley was politically unified at least from the start of the Early Intermediate Period, Silva does not identify one of these sites as the dominant center or “capital”, but proposes that Cerro Culebras, Playa Grande and Copacabana worked together as a sort of political nuclei during the early and middle phases of the Lima sequence (Silva 1996: 147). Toward the end of the Early Intermediate Period (late in the Lima sequence) several major monumental buildings in the lower valley fell into disuse. The abandonment of the public architecture in the lower valley did not extend to the residential units, which continued to be occupied (Silva, Morales et al. 1988; Paredes 1992; Silva 1996).

Silva (1992) states that there are only a few sites with evidence of been occupied immediately after the demise of the Lima culture (and into the Middle Horizon). These few sites have yielded ceramics in Wari-related styles; however in his survey the Wari-style material was associated with burial sectors, and not directly associated with residential zones at the sites. Overall, Silva was not able to generate a picture of settlement patterns in the Valley after the early phases of the Middle Horizon Period.

2.2.2.2 Rimac Valley

The Rimac Valley is under heavier modern urban pressure than the Chillón Valley, and correspondingly, settlement pattern study is even less complete. It is only possible to barely sketch settlement patterns in the valley during the Early Intermediate Period. The most comprehensive settlement information to date remains the early work of Louis Stumer (1954; 1956). Stumer surveyed the Rimac Valley from the coast to about 1000 msnm of altitude. The survey was never completely published, but information from it comes to light in more general discussions in which Stumer sought to place the valley occupation within Schaedel's (1951) settlement models for the north coast (Stumer 1954).

Following Schaedel's ideas (Schaedel 1951), Stumer (1954) classified the Rimac Valley sites of this period based on their size and monumentality. These categories were: 1) ceremonial centers, 2) urban elite centers, 3) urban lay centers, 4) provincial elite centers, 5) highland sites, and 6) unit sites (mostly disperse and isolate domestic units). Using these categories, Stumer (1954) found evidence of increased centralization in the lower Rimac Valley during the Early Intermediate Period (an increase in monumentality, and in the number of first tier sites), with the site of Cajamarquilla at the apex (Stumer 1954; Canziani 1987). Stumer (1954) argued that this increase in monumentality continued in the Rimac Valley even after the Chillón public buildings had fallen into disuse, and marked a slow shift in the political center of the Lima culture from the Chillón Valley to the Rimac Valley during the last phases of the Lima sequence. This process of centralization culminated with the "spread" of Lima culture to the adjoining Lurín valley (Stumer 1954: 144).

Stumer believed that Wari influence or contact in the Valley was very limited. Stumer (1954: 133 – 136) argued that Wari-related pottery was only found at the top level sites of his settlement hierarchy, and therefore “contributed little” or “nothing” to local development

2.2.2.3 Lurín Valley

Patterson’s 1960’s survey of the Lurín Valley identified 96 sites with Early Intermediate Period occupations (Earle 1972; Dunn 1979; Patterson, Mc Carthy et al. 1982; Feltham 1984). Patterson’s survey data was not published completely, but was partially presented in several papers discussing specific case studies or periods (Feltham 1982). For example, his data was used in discussing the emergence of a Lima state (Earle 1972), and to test concepts like “vertical control” as a system of economic distribution that involved people from the coast and the highlands (Patterson, Mc Carthy et al. 1982).

Patterson and colleagues stated that during Phase 5 of the Early Intermediate, which corresponds roughly to the first two phases of his own Lima style sequence, a process of centralization began in the valley that culminated with the construction of one of the main temples at Pachacamac at the beginning of the Middle Horizon. At the same time, he saw evidence for marked intensification of agriculture, with the construction of new irrigation canals (Patterson, Mc Carthy et al. 1982), concomitant with an increase in number of sites, especially into the Chaupi-Yunga (Earle 1972; Patterson, Mc Carthy et al. 1982).

Patterson generally describes the settlement patterns in the Valley as “dispersed” (Patterson, Mc Carthy et al. 1982: 69), with Pachacamac being the only monumental site mentioned. However, it is now known that there is at least another site with public structures in the lower Lurín valley. This site is called “Huaca Colorada” and contains a structure made with a mix of “little mud bricks” (*adobitos*) and “*tapias*” built over a natural hill (figure 2.5).



Figure 2-5 “Huaca Colorada” in the Lurín valley

In 1968, Earle made a more detailed and sophisticated settlement pattern analysis for a section of the valley (Chaupi-Yunga) as part of his honors bachelor’s thesis. He made a seriation of plain wares, linked it to the sequence in decorated pottery, and cross-tied occupations and ceramic phases into Patterson’s 1966 sequence (Dunn 1979: 17). Earle also established an association between the distribution of Lima pottery and a marked increase in the number of small, village scale sites in the Valley. Like Patterson, Earle (1972) suggested that this change in pattern was due to population increase and agricultural intensification. These villages were comprised of residential units and shallow, associated, midden, with no evidence of multicomponent occupation (Earle 1972: 469).

Around AD 400 – 500 (EI Phase 7), the time of state emergence, there were changes in settlement pattern, agricultural intensification, and the appearance of “elite” households at small village sites (Earle 1972). These villages are located on the hills at edges of the valley floor, with the elite households usually present as enclosed compounds at the top of the hill (Earle 1972; Feltham 1982). Lote B is one of these compound-village type sites:

“These compounds are similar to the standard units in their stone construction...Eight to 10 rooms are arranged in 2 conjoined parallel lines. Walls meet at 90 degrees angles in all cases. Rooms are approximately 2x3 m...it was originally thought that such structures might represent storage areas but the presences of middens and large stones suggest that they were definitively for habitation... [they] are the first evidence of stratification in living areas (Earle 1972:475).

Earle maintained that these compounds corresponded to fairly independent elites, as shown by the high diversity of plain ware ceramics among these communities (Earle 1972).

As discussed later, my excavations at Lote B showed a very different pattern. Lote B had a long occupational sequence, the stone architecture does include specialized storage facilities, and the site represents not elites living in a village, but on a hill top overlooking dispersed commoner settlement (of homesteads or non-nucleated hamlets).

2.2.3 Residential Patterns and Household Differentiation

Earle's work was important as the first on the central coast to systematically consider issues of sociopolitical organization and differentiation in residential life. In general, prior archeological studies on the central cost had made little attempt to reconstruct social differences or characterize the socio-political structure of the society known as the Lima culture.

The research of the 1960s - 1980s made it possible to distinguish two types of residential patterns in the Lima culture during the Early Intermediate Period. In the lower valleys, residential structures clustered around public buildings, or were grouped into villages

located in proximity to sites with public buildings (Silva, Morales et al. 1988); Paredes 1992, Stumer 1953,1954). In contrast, in the Chaupi-Yunga and in the Lurín Valley, residential units were dispersed in homestead fashion, of very loosely grouped into small communities (often on the hills overlooking the course of the river) with significant distances between houses. While it seems obvious that these different patterns correspond to differing landscape characteristics in each area, the settlement differences may also have implications for varying patterns in economic specialization, group identity and political structure (Silva 1996).

Few attempts have been made to study Lima culture social and economic differentiation in residential patterns, and how it changed through time, for the central coast. There has been almost no household archaeology for the central coast for this time period. Even as late as 2000, investigation of a residence near a public building at Maranga produced nothing more than a discussion of associated ceramic styles (Mackay and Santa Cruz (2000).

The notable exception is Cerro Culebras in the lower Chillón Valley, where domestic structures have received more attention than at any other Lima site (Silva, Morales et al. 1988; Paredes 1992; 2000).

Cerro Culebras contains a public building known its mud frieze, executed in Middle Lima style (see Paredes 1992). A second sector of the site consists of what Paredes (1992: 61) felt was non-domestic architecture of unknown function; mortuary structures, administrative structures, or storage depots. A third sector of the site he identified as composed of “common” residence units. Silva and colleagues have a slightly different reading of the site. They identify two different sectors of households, one in the northern part of the site constructed primarily of cane, and another sector where dwellings were constructed with small stones and little mud bricks (Silva, Morales et al. 1988: 27 -29). Silva et al. (1988) carried out excavations

in both of these sectors, finding that the stone residences were associated with greater consumption of shellfish (*Mesodesma donacium*, *Perumytilus purpuratus* and *Semimytilus algosus*). In residential sector of cane architecture, they found hearths, deposits of pots, *manos*, *batanes* (grinding stones), cotton seeds, that led them to believe that these households were more involved in agricultural activities (Silva, Morales et al. 1988: 30 - 31). They saw no differences between the ceramic assemblages of the two residential sectors, which led to the conclusion that household differences at the site were more related to economic specialization than to wealth differences among households. Because stone residences were thought only to be found at sites with public architecture, and hence potentially represent an elite class of dwellings, the investigators further suggested that fishing constituted a specialized domestic activity with higher prestige than farming in Lima society (Silva, Morales et al. 1988: 31; Silva 1992: 401). The idea is provocative, but needs to be investigated further. The higher quantities of shellfish in one sector at Cerro Culebras, for example, could simply correspond to different diets, as the investigators do not report any differences in proportions of fishing or agricultural tools, only relative differences in quantities of shell.

For the Chaupi-Yunga zone, Guerrero and Palacios (1994) briefly studied several village sites in the Rimac Valley. They excavated at El Vallecito and Huampani, collecting ceramic samples in order to compare these assemblages with those recovered from several dispersed settlements located in Huachipa. Although they defined separate sectors inside El Vallecito and Huampani (fig.2.6 and 2.7), these were principally delineated in relation to their location in the landscape, and little actual inter-sectors comparison was made. They refer vaguely to social differences inside the El Vallecito settlement, based on the presence in Sector C of this site of a rectangular building with more elaborate architecture (plastered walls) and larger internal rooms (Guerrero

and Palacios 1994: 280) (figure 2.7). The authors believe this rectangular building could have served public functions, and the surrounding dwellings would likely have been the higher status inhabitants of the site.

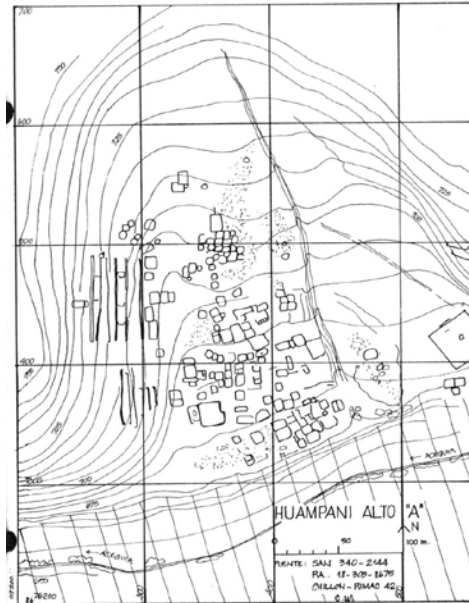


Figure 2-6 “Huampani Alto” from Guerrero and Palacios (1994)



Figura 2. Levantamiento de foto aérea del sitio “El Vallecito” (Golf de Huampani).

Figure 2-7 “El Vallecito” from Guerrero and Palacios (1994)

In general, the Guerrero and Palacios (1994) study was focused on ceramic styles represented at these three locations, and the issue of chronological relationship among all components of all three sites is open to question. Nor do the authors present quantitative information on the assemblages or on the provenance of their samples. They identified a local ceramic component (which they call Huachipa) in the Middle and Late Lima phase assemblages, that they interpret as ancestral to the Nievería style (Guerrero and Palacios 1994: 306 - 308). Linking the emergence of this latter style to the concurrent evidence for increasing agricultural storage at the sites, the authors make the argument that the Huachipa/Nievería ceramic tradition emerge part of an ideology and ceremonial practices related to control of the expanding agricultural production (Guerrero and Palacios 1994: 299,300 - 306).

Another residential study in the Chaupi-Yunga took place in the Chillón valley, when Dillehay excavated at Huancayo Alto during the years 1974 and 1979, exploring coastal – highland interactions. Dillehay notes a transformation in settlement late in the Early Intermediate Period, with the construction of a “coastal style adobe multiroom secular building,” (associated with Lima ceramics in Maranga style or Late Lima style, together with “elaborate coastal-style textiles”) at the same time as the building of a set of circular dwellings (lacking associated Lima-style pottery) representing highland colonists (Dillehay 1979:27) (fig. 2.8).

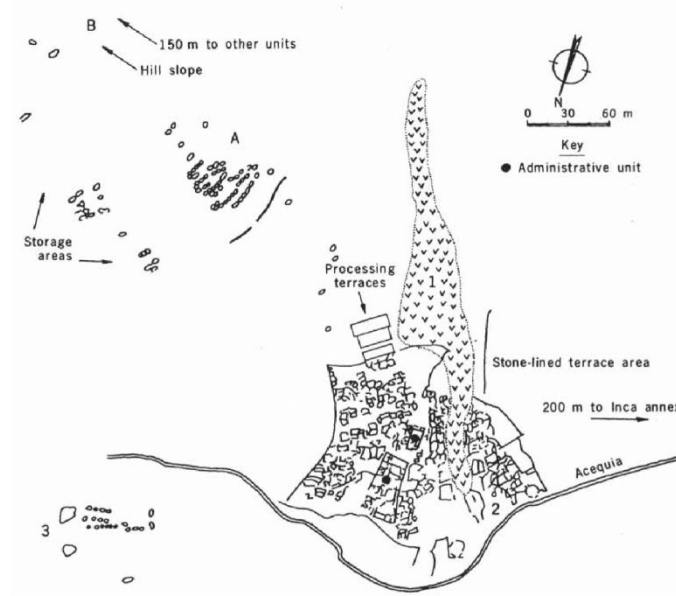


Figure 2-8 “Huancayo Alto” from Dillehay (1979)

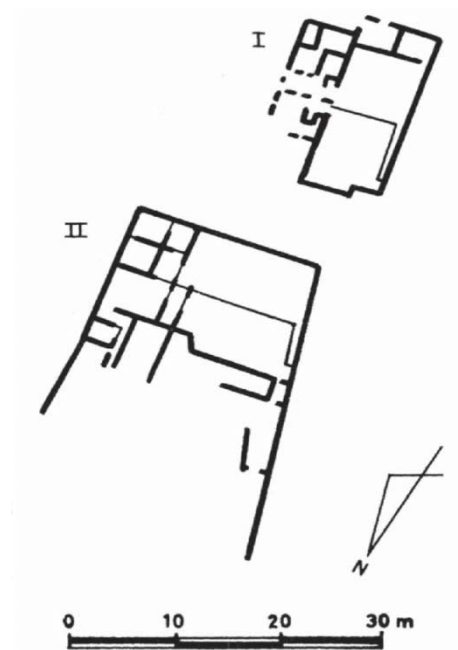


Figure 2-9 Potential administrative structures at “Huancayo Alto” from Dillehay (1979)

Dillehay proposes that the building had secular administrative functions (Dillehay 1979) (figure 2.9:I). Dillehay further proposes social differences between the new highland inhabitant

of Huancayo Alto, and the coastal-affiliated population already living there. Dillehay proposed that the coastal population correspond to coastal administrators with a high social status (Dillehay 1979:29). He based this surmise in part on the fact that the Lima pottery was associated with four multiroom, rectangular structures, relatively close to the administrative building, showing greater architectural investment (adobe walls and interior niches and benches), and yielded high value objects of copper elaborate textiles. In contrast, the highland-style pottery was associated with the isolated, circular structures of *quincha* (pole and thatch), with a limited associated material inventory, representing a relatively lower social position for the highland colonists.

Later, in Dillehay's Phase 3 (which correspond roughly with the start of the Middle Horizon), a new administrative building was constructed behind the structure mentioned above (figure 2.9, building II). This second building was completely associated with highland wares. For Dillehay, the coexistence of two abode administrative buildings associated with such different ceramic assemblages, together with the expansion of storage facilities at the site, indicates a, "social and political dual structure functioning at the site" (Dillehay 1979:28).

A few kilometers away from Huancayo Alto is Soccos, a site with another rectangular, non-domestic building associated with domestic terraces and structures. Based on ceramics and textile fragments recovered from the surface and from the rectangular building, and from what they view as the orthogonal layout of the structure with interior storage rooms (fig.2.10), Isla and Guerrero (1987) argue that the site represents the incorporation of the area into the Wari polity (Schreiber 2001; Jennings and Craig 2001).

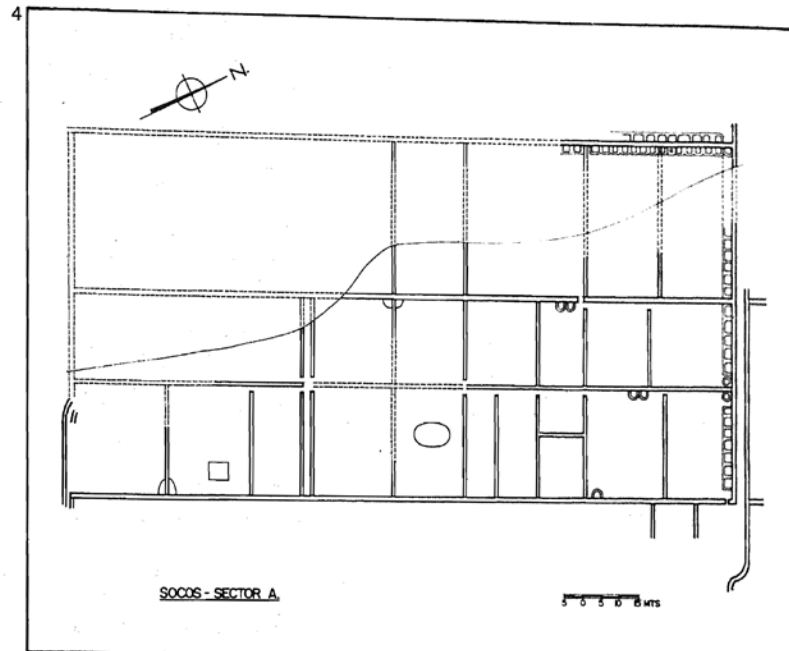


Figure 2-10 Rectangular building at Soccos, from Isla and Guerrero (1987)

However, Silva (1992) has pointed out correctly that the material found on the surface has at best a weak association with the domestic structures and the rectangular building. The Middle Horizon materials are rare, and likely come from burial contexts. Too, the Middle Horizon materials represented correspond to the Middle Horizon 3 and 4; a time after the imperial expansion of Wari. In addition, the published surface assemblages include fragments from different periods, such as Lima, Late Middle Horizon and Late Intermediate Period.

The presence at Huancayo Alto, El Vallecito, Huampani and at Lote B (fig. 2.11) of roughly similar rectangular buildings associated (through excavation) only with regional Lima ceramics leads me to question the identification of the building as a Wari imperial facility. This type of building apparently was no stranger to the area during the late Early Intermediate Period, and, as proposed by Dillehay, such might represent the growth of a coastal Lima settlement hierarchy, not an intrusive imperial expansion.

In sum, the limited investigation of residential sites of the Lima culture, to date, provide glimpses of a pattern of a higher status or elite segment, living stone (and little mud brick) dwellings, in proximity to public architecture and specialized storage buildings

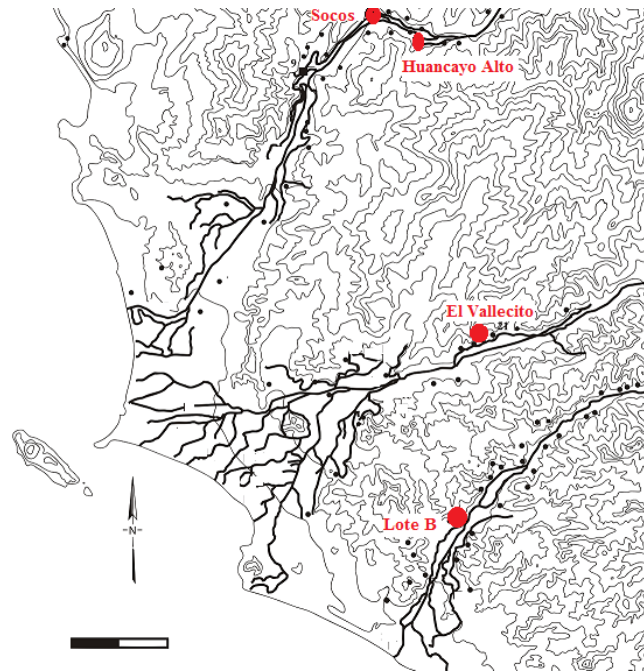


Figure 2-11 Location of the sites Soccos, Huancayo Alto, El Vallecito and Lote B in the central coast

2.3 CURRENT INTERPRETATIONS OF LIMA SOCIOPOLITICAL ORGANIZATION

The Peruvian central coast presents evidence of political centralization as early as the Formative Period (Silva 1996). By the start of the Early Intermediate Period, a process of political centralization was clearly ongoing, accompanied by increasing social inequality, significant population increase, and extension of agricultural systems (Silva 1992; Silva 1996).

There is a consensus among researchers to consider the lower Chillón Valley the political and cultural center of the Lima culture in the first part of the Early Intermediate Period, because of the relatively early and complex settlement hierarchies there (Kaulicke 2000, Silva 1996). Such hierarchies do not necessarily indicate regional political unification. Although Silva (1996) recognizes these hierarchies, he chooses not to single out any one of the larger centers as the “capital,” but instead discusses the possibility that Cerro Culebras, Playa Grande and Copacabana co-existed as political centers (Silva 1996: 147). There is also relative agreement that the center of power subsequently shifted from the Chillón to the Rimac Valley (Agurto Calvo 1984; Kaulicke 2000). For the Rimac Valley, Kaulicke (2000: 325) has posited that sites high up in the settlement hierarchy (Maranga, Cajamarquilla, Huaca Juliana and Vista Alegre) site functioned as city states. On the other hand, Agurto Calvo (1984) has a different view. He considers Maranga the initial center or “capital” of the Lima polity in the Rimac Valley (Agurto Calvo 1984: 78), to be replaced by Cajamarquilla at the beginning of the Middle Horizon. However, Mogrovejo’s (1999) excavations at Cajamarquilla make him believe that Cajamarquilla and Maranga were contemporaneous centers (Mogrovejo 1999). In short, while there is convincing evidence for political hierarchies, the nature of these hierarchies, or how communities were integrated into polities, remain very much open questions.

2.3.1 Hypotheses for the emergence of the Lima state

Research to date has shown, at least at the regional level, significant changes in political organization and settlement at the beginning of the Late Lima phase: an increase in the number and monumentality of sites; a marked change in iconography, from figurative designs of “serpent” heads to more stylized representations of the same motif; shifts in burial practices

(from extended and wrapped in cane litters, to seated and wrapped in textiles); and the appearance of Wari-style ceramics, mostly in association with elaborate burials and with monumental architecture sites. For some archaeologists, these changes accompanied the emergence of a state-level Lima polity at this time.

Hypotheses relating to changes in social differentiation in Lima state emergence can be divided into two broad categories. One category of hypotheses stresses the emergence of a political economy strongly characterized by wealth and consumption differences (i.e. a class-based society). This stratification would have stemmed from elite domination of agricultural intensification and surplus mobilization, perhaps through control of prime land and canals (Dillehay 1979, Earle 1974, Patterson et al 1982), through elite domination of the flow of agricultural goods inside a vertical exchange system (Dillehay 1979:25), or through the control of kin-based labor mobilization by hereditary community leaders (Patterson et al 1982:64).

As noted above, a number of investigations have suggested elite involvement in the mobilization of surplus, as manifested by the presence of specialized storage structures at public architecture sites. Craft specialization, particularly of textiles, has also been proposed as important to Lima political economy, with the highest quality textiles constituting important wealth goods. There is evidence for increased specialization in the production of fine textiles through the Lima phases, in particular those produced in the “*tapiz*” technique (Agurto Calvo 1984; Mogrovejo 1995). The designs in this textile are based on local iconographic traditions, similar to the ones used on ceramics and in the “*frisos*” covering public architecture (Kroeber 1954; Agurto Calvo 1984). These fine textiles have been recovered in association with public buildings and burials (Mogrovejo 1995). So far, there is no evidence of how textile production was organized. Flores (2005) proposes that fine tapestries were likely produced in some of the

rooms of the major pyramid compounds at Huaca Pucllana, because some fill levels in the principal plazas of the complex contained abundant textile fragments and needles. She (Flores 2005: 39) suggests this represents a specialized production of textiles in some of these rooms parallel to the textile production in the Inca the Acllahuasis.

Other researchers have noted the proposed an increase in the standardization of ceramics wares during the later Lima phases. Earle's studies of pottery from the Lurín Valley that uniformity within and among assemblages increased dramatically toward the end of the Lima sequence, with a particular tendency towards uniformity in plain wares (Earle 1972: 469 – 470; Dunn 1979:27). Earle (1972: 476) took this trend as proof of centrally-organized pottery production by the end of the sequence (Earle 1972: 476) . This standardization could also have been a product of the increase movement of ceramics from the neighboring Rimac into the Lurín Valley, indicating, Earle (1972) suggests, that by the Late Lima phase, the fairly independent settlements in the Lurín valley came to be directly integrated into the Lima politico-economic system.

The second category of hypotheses stresses the role of external ties, with elite status increasingly tied to participation in exchange networks of ideologically-charged prestige items (Shady 1982, 1988), through emulation of Wari elites, or through “clientage” relationships with the Wari Empire (Menzel 1964, Kaulicke 2000, Isla and Guerrero 1987). Dillehay (1979) has argued for an important trade of agricultural and staple goods, rather than prestige goods, between Lima coastal elites with neighboring populations from the highlands, in particular in the Mantaro Valley (Browman 1975; MacNish, Patterson et al. 1975; Dillehay 1979). Dillehay (1976, 1979) suggested that this exchange was managed by Lima elites at interaction nodes such as Huancayo Alto in the Chillón valley (Dillehay 1976, 1979). Although it is likely that central

coast elites participated in long-distance exchange networks to some extent, the direct evidence for such participation, let alone its political import, does not yet exist. There is no evidence of materials being exported from the central coast, other than Nievería style ceramics. This style, associated with burials and monumental architecture, has a wide distribution in the Andes, appearing in regions like the north coast (Castillo 2007), the central highlands (Lau 2005) and at Wari itself (Knobloch 1991).

2.3.2 The Lima Polity and the Wari Empire

The role played by the highland-centered Wari empire in political development on the central Peruvian coast, directly or indirectly, continues to be the subject of debate (Marcone 2010). Decades ago, researchers following Menzel's (1964) survey of the distribution of pottery styles, saw the Lima cultural area as heavily influenced by Wari, culturally and politically. Much of this "Wari-style" material on the coast was known from elite offering and mortuary contexts, implying the interaction with the Wari polity may have furthered the growth of political hierarchies in the area. Makowski (2002), for example, links the large-scale changes that occurred during the Late Lima phase to the expansion of the Wari Empire into the region. Other scholars, however, were dismissive of significant Wari effects, culturally or imperially, on the Lima population, arguing that Wari had at most a "limited impact" (Stumer 1954). These scholars argued that a Lima state existed before the start of the Middle Horizon Period (Patterson et al 1982; Dillehay 1979; MacNish et al; Kaulicke 2000, Earle 1972), limiting a potential Wari role to the collapse of the Lima polity. Schreiber (2001:89) offers a conventional "Wari-centric" view:

“On the central coast, a few Wari sites have been tentatively identified, but the major cultural event of the Early Intermediate – Middle Horizon transition is the collapse of the Lima polity (Stumer 1956). This culture was relatively complex, probably organized at the level of multiple chiefdoms, and its large sites included massive adobe mound constructions. While all of these sites were apparently abandoned at the start of the Middle Horizon, it is yet unclear whether the Lima collapse was due to Wari conquest or to other factors such as climatic deterioration. No clearly Wari sites are known in the Lima area, but the Nievería ceramic style of the Middle Horizon exhibits a blending of local and Wari elements”.

The presence of Nievería style pottery in the core of the Wari polity in pre-imperial epochs lends support to the idea that Nievería iconography reflects a pan-regional canon, rather than a decorative style or ideology specifically associated with the Wari polity (Knobloch 1991). As Knobloch (1991(1991) suggests, “the early Epoch 1A presence of a few Nievería style shards at Huari with Chakipampa and Ocros refuse followed by the later Epoch 1B presence of fancy Chakipampa animal icons on Nievería pottery indicates a rather “long” and rather “peaceful coexistence” between the two areas.” Alternative interpretations are possible, and I offer (Marcone 2010) elsewhere a more complete discussion of the Nievería style in the Lurín Valley.

A new and challenging hypothesis for the role of interaction with the Wari empire in Lima sociopolitical developments can be drawn from research in the Cotahuasi Valley to the

south and elsewhere (Jennings and Yepez 2001; Jennings 2006a, 2006b; Lau 2005). Pre-Middle Horizon and Middle Horizon period changes in the Cotahusai Valley are very similar to those seen in the Lima area, including: intensification of agriculture, increases in political hierarchy and social stratification, and adoption of Wari-style ceramic and architectural preferences. Recently, investigators in Cotahuasi have proposed an *emulation* hypothesis, arguing that these changes were largely endogenous, resulting from local elites entry into a wider, central Andean elite political culture in which Wari images and canons were cultural capital, rather than the result of Wari political or economic hegemony. As Jennings (2006a:369) concludes, “Cotahausi’s emerging elites appear to have seized upon the “international” identity of the Wari state less in a desire to associate themselves with a vaguely understood distant state, and more in a bid to forge a shared identity with neighbors.” This process included incorporation of Wari canons in public/elite architecture, diacritical feasting, and elite domination of exchange. One objective of my research was to determine if Lote B fit this pattern.

Implicit in all current perspectives on Lima state emergence is a Late Lima phase transformation - particularly at the level of the community and involving what can be called “intermediate elites” - in social differentiation and political leadership, with Lima society moving from weakly defined status hierarchies, perhaps mostly based on ideology, to hierarchies based to a larger degree on economic processes (surplus mobilization, craft production, or exchange), and associated with marked wealth differentiation (Cook 2004:146; Lumbreras 1980,2000 ; Patterson 2004).

2.4 THE LURÍN VALLEY AND LOTE B

How and when the population in the Lurín Valley was integrated into the Lima polity remain poorly understood. One hypothesis is that the major changes in settlement and ceramic distributions in the Lurín Valley at the Late Lima phase reflect the incorporation of the valley's population into an overarching Lima political system (Earle 1972; Patterson, Mc Carthy et al. 1982). In this view, the Lima polity provided unification for the Lurín population, which was previously dispersed, and lacking any valley-wide centralized organization. Alternatively, Makowski (2002) argues that the Lurín population had been organized into a set of kin-based chiefdoms, which became incorporated into the Lima polity earlier, during the Early - Middle Lima phases. Prior to my work in 2009, no excavations of a Lima-associated site in the Lurín Valley had taken place, with the exception of large ceremonial center of Pachacamac. The Lima phase occupations there provide a limited but valuable source of comparative information on potential elite/ceremonial activities and materials for Lote B.

2.4.1 The Lima period at Pachacamac

The oracle function of Pachacamac is best known from ethnohistoric sources and has been projected into earlier times. So, for example, it has been argued that Pachacamac was an Early Intermediate sanctuary co-opted by the Wari empire, from which the empire based its expansion throughout the central coast (Menzel 1964). In fact, almost nothing can yet be said about the Lima period function of Pachacamac, although this is likely to change given the current research going on at the site.

The evidence of Lima period occupation at the site can be divided into three types: (1) burials, most of which were uncovered by early archaeologists or looters, and which, for the most part, good contextual information is absent; (2) monumental architecture in the central area of the Sanctuary, including the “Old temple of Pachacamac”, the “Urpiwachac” temple and other structures (Figure 2.12); and (3) less monumental structures located in the western part of the site, the best known of which is the Complex of the Adobitos or “little mud brick compound.” This compound was initially explored in 1968 by Alberto Bueno and Alberto Bueno (Bueno 1982), and I excavated there in 2000 (Marcone 2000). These less monumental have been proposed to have served as secondary temples, or as administrative structures oriented to more secular activities than those performed at the larger, central temples.

Despite the presence of small amounts of Early/Middle Lima phase ceramics at Pachacamac, is not until the Late Lima phase that the site begins to take on monumental dimensions. The building explosion in Pachacamac is more or less contemporaneous with the last occupational phase (Late Lima) at Lote B and with the construction of the majority of the extant public structures found there.

The “Old Temple Pachacamac” (Figure 2.12) is traditionally viewed as the main building at the site during the Lima occupation. Archaeologists have identified three phases of construction, falling in the later part of the Early Intermediate Period, before the temple was abandoned in favor of new temples during the Middle Horizon (Shimada 1991; Franco Jordan and Paredes Botani 2000).

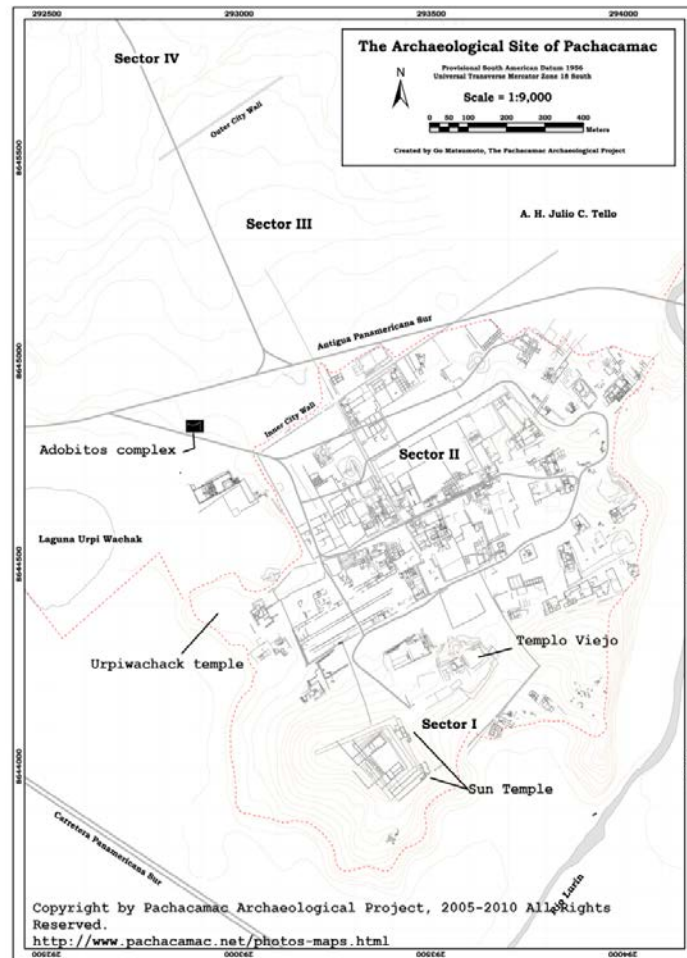


Figure 2-12 Pachacamac – The Pachacamac Project (<http://www.pachacamac.net/photos-maps.html>)

The Old Temple was connected by a platform to another Lima period mound buried underneath the Inka constructed Temple of the Sun. The first to report this earlier mound was Uhle, and the observation was confirmed years later by Strong and Corbett (1943; Shimada 1991). According to the analysis of Patterson, this mound under the Temple of the Sun would belong to Phase 7 of his stylistic sequence (Patterson 1966), roughly corresponding to the Late Lima phase.

Another building traditionally assigned to the Lima culture in the sanctuary is the Temple of Urpiwachac. This building bordered the prehispanic Lagoon of Urpiwachac, along the west side of the site. Ponciano Paredes (1991) has chronologically placed this temple too in the Late Lima phase.

To the northwest are the smaller, non-domestic structures that include the Complex of the Adobitos. Today these structures are covered by sand, but it is possible to distinguish on the surface buildings with *adobitos* walls and earthen tamped floors. In 2000, as part of Pachacamac site museum team, I excavated a portion of this complex (Marcone 2000). This ceramic assemblages initially excavated in the 1960's by Borja and Bueno had been studied by Lavallée (1966), who had determined that the ceramics closely resembled those found in the Rimac Valley. The ceramics recovered in direct association with the compound, both by me and by Borja and Bueno, do not show any non-local or highland styles (Lavallee 1966; Marcone 2000).

Based on the ceramic associations, reuse of building materials and the relative continuity in architectural layout, I believe that the little mud brick compound at Pachacamac was constructed and remodeled in a relatively short span of time (Marcone 2000; Marcone 2010). These characteristics suggest intensified activity at the site in the Late Lima phase, that I link to the incorporation of the site (and the Lurín Valley as a whole) into an over-arching Lima system (Marcone 2000; Marcone 2010). I have proposed elsewhere that the activities carried out in the *adobitos* complex were feasting activities, with ritualized distribution of food acting to create social debts, and oriented toward obtaining labor and support from commoners (Marcone 2010)

2.4.2 Lote B

Lote B, also known as Cerro Manchay, is located in the lower Lurín Valley, on the summit of a hill overlooking the Manchay “quebrada” pass connecting the Lurín and Rimac Valleys (fig 2.13; 2.14). It was first recorded as a site (#PV48 – 145) in the Patterson survey (Patterson, McCarthy et al. 1982). The first systematic work (in which I participated) at Lote B took place in

1993 in the form of mapping as part of the survey activities of the *Tablada de Lurín* archaeological project direct by Krzysztof Makowski.

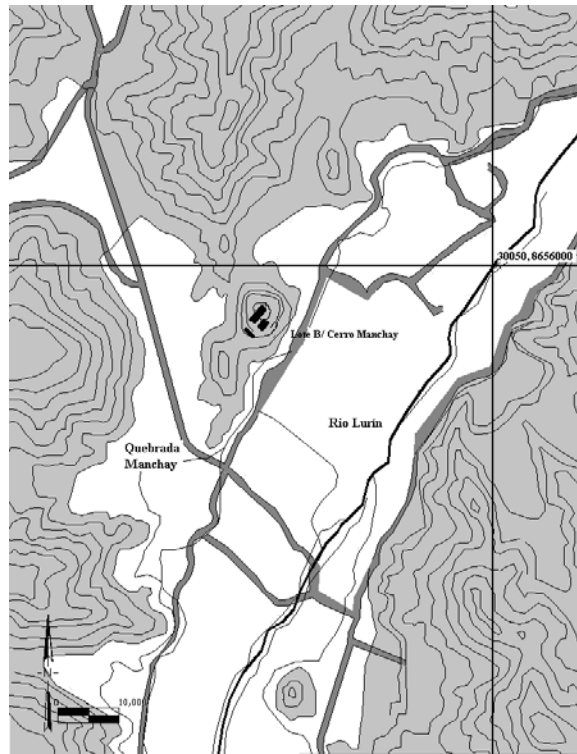


Figure 2-13 Lote B location between Lurín and Manchay



Figure 2-14 Lurín valley and the Manchay Quebrada from the top of Lote B

The site can be divided on the basis of topography and surface architecture into four sectors. Sectors 1 and 2 represent complexes of domestic architecture. Sector 3 contains a rectangular, non-domestic architectural unit that combines storage spaces with large patio areas. Sector 4 contains another non-domestic architectural complex, with smaller rooms, and more

restricted access (fig 2. 15). At little more than 1 ha in size, Lote B does not rank as a first-order, or even a second-order, site in the Lurín Valley's Lima period settlement hierarchy.

The commoner occupation that would have been associated with Lote B would likely have been scattered, in a relatively dispersed way, at the base of the hill, overlooking the river plain. Patterson's survey in the 1960s around the foot of the hill recorded thin artifact scatters, lacking stone architecture, including his sites # 149, 151, 152, 154, and 155 (Patterson, Mc Carthy et al. 1982). Sites have not preserved on the heavily agriculturally utilized river plain

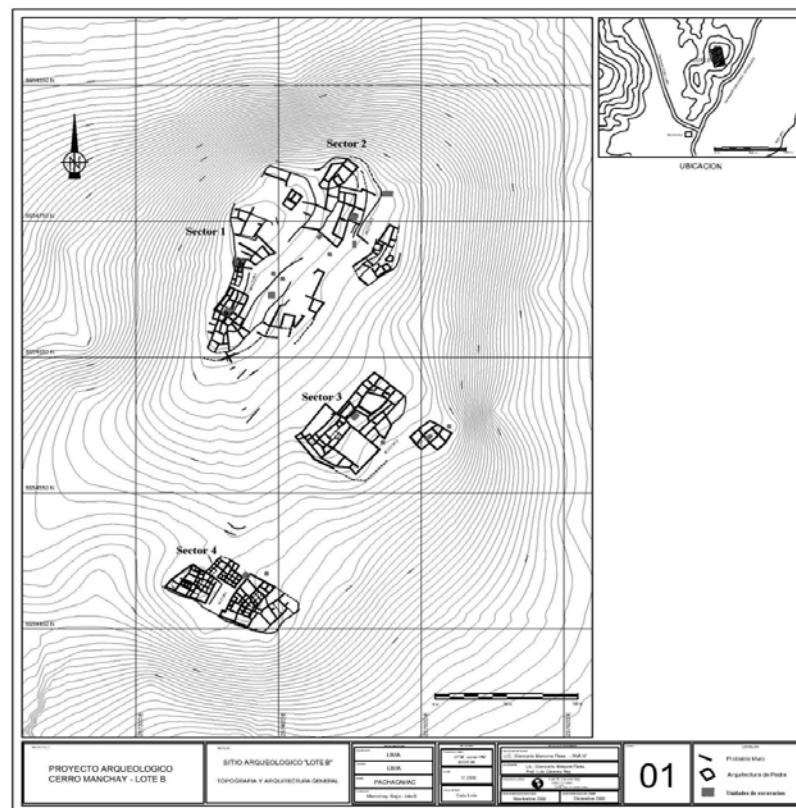


Figure 2-15 Lote B – General Map

2.5 RESEARCH QUESTIONS

To explore the development of intermediate elites in the Lima polity, as seen at Lote B, I needed to determine what activities were taking place there. Therefore, my work aimed at addressing the following research questions.

What is the nature of the variability among the Lote B sectors?

Answering this question entailed determining the functions represented by the different architectural complexes, as well as using artifact assemblages to discern differences in activities among the sectors. This question bears on the general hypothesis that as political integration developed in the Lima polity (or polities), leaders would have taken on new roles. If so, these new or expanded roles (ranging from economically managerial to ritual leadership) might be manifested in elaboration in residential architecture, as well as in the building of specialized, non-domestic architecture, such as storage and ceremonial facilities.

To answer this question, I mapped the architectural complexes of each sector, excavated within architectural spaces, and also sought out for excavation midden deposits likely to be associated with the use of the architecture.

How did Lote B evolve as a settlement?

Answering this question involved determining how use of space at the site changed through time, and when in the occupational sequence particular architectural units were constructed. It has been hypothesized that the emergence of the Lima state in the Late Lima phase was accompanied by increases in social stratification generally, including the emergence of mid-level privileged families that formed an “intermediate elite” in the Lima polity. If so, then we should expect to see marked changes at Lote B in the Late Lima phase, with these changes informing us as to the nature of Lima intermediate elite political economy.

What activities associated with elite domestic life or with political power changed at Lote B?

If Lote B residents went from being local leaders to intermediate elites, then we might expect to see them adopt activities, architectural canons, or stylistic preferences shared with elites outside of the Lurín Valley, in domestic and/or public contexts. A second hypothesis to be tested is supposition that the political economy of states is more likely to involve intermediate elites in economic strategies, particularly mobilization of surplus, than public ritual activities which would take place at higher order ceremonial centers.

Were Wari-style materials incorporated into local life?

Some constructs for the development of the Lima state stress the importance of contact with the Wari polity, in the form of “clientage” relationships with the Wari Empire, emulation of Wari elites, or local elite participation in exchange networks of ideologically-charged Wari prestige items. Therefore an important issue to resolve is whether or how Wari-style materials (including Nievería pottery) were utilized at Lote B.

2.5.1 Fieldwork at Lote B

To generate the information needed to address the above research questions, my project consisted of a three-step program of mapping and excavation. First, a detailed “total station” mapping of the site defined architectural layouts and the location of open (plaza and patio) areas, and middens, paying attention to the construction techniques and access patterns in the architecture. Next, we excavated test units in the main midden areas identified in the surface mapping. Finally, broader excavations were made inside the architecture to document the activities taking place in interior spaces and to date the construction buildings. Because my

permit did not permit me to disturb well-preserved public architecture, these last excavations were of limited depth. A total of 17 excavations units were excavated in the four sectors (Table 2.2).

Unit #	Sector	Unit Type	Original size	Final size	Final deepness	Context
1	1	Test Pit	2x2 meters	4x4 meters	0.50 meters	Hearth
2	1	Test Pit	2x2 meters	2x2 meters	2 meters	Midden
3	1	Test Pit	2x2 meters	2x2 meters	2.70 meters	Midden
4	2	Test Pit	2x2 meters	2x2 meters	0.20 meters	Outside area
5	2	Test Pit	2x2 meters	4x2 meters	0.70 meters	Outside area/refuse
6	2	Test Pit	2x2 meters	6x2 meters	2.10 meters	Midden
7	1	Area	4x4 meters	5x4 meters	1 meter	Storage facility
8	1	Area	4x4 meters	4x4 meters	0.7 meters	Storage facility
9	2	Test Pit	2x2 meters	4x2 meters	1 meter	Outside area
10	2	Area	5x5 meters	5x5 meters	0.7 meters	Room
11	3	Test Pit	2x2 meters	2x2 meters	0.5 meters	Midden
12	3	Area	4x2 meters	4x2 meters	1.20 meters	Room
13	3	Test Pit	2x2 meters	2x2 meters	0.60 meters	Midden
14	4	Test Pit	2x2 meters	2x2 meters	2 meters	Midden/Burials
15	4	Area	4x3 meters	4x3 meters	0.40 meters	Doorway
16	3	Area	10x5 meters	10x5 meters	0.20 meters	Public Architecture
17	4	Area	2x2 meters	2x2 meters	0.20 meters	Storage facility

Table 2-2 Excavation Summary

3.0 EXCAVATION OF SECTOR 1

3.1 INTRODUCTION

Sector 1 proved to be a zone of residential architecture located at the apex of the hill, with a view of both the Lurín Valley and the Manchay *quebrada*. Excavations aimed at determining the function of architectural spaces, recording stratigraphic associations, and producing artifact assemblages from activity and midden contexts. Five excavation units (1, 2, 3, 7 and 8) were excavated in this sector; Units 1, 2 and 3 in exterior locales, and Units 7 and 8 in the main architectural complex. This chapter describes the stratigraphy, and features encountered. The analysis of artifact assemblages is presented in Chapter 7.



Figure 3-1 Sector 1, Lote B

3.2 SECTOR 1 – DESCRIPTION

Sector 1 (fig 3.1) consists of two architectural components: a room complex covering roughly 120 x 40 m, and, to the south, a 70 x 30 m area of outdoor court/plaza spaces. The room complex follows the contour of the hill, creating an amphitheater-like setting for the relatively flat plaza area. The latter was created through a series of terraces, made on the steep slope that separates Sector 1 from Sector 3 to the south. Most of the architecture consists of walls composed of small, local stones set in mud mortar. Walls average 30 cm wide, but only the foundation course has preserved. On the hill crest, at the highest point of the site, the architecture ties into a poorly preserved elevated structure or platform.



Figure 3-2 View of the upper part of sector 1

3.3 EXCAVATION OF UNIT 1

This unit was located in the space between the main architectural complex and the plaza/terrace zone to the south. The unit was situated to explore an area of intense charcoal and ash accumulation visible on the surface. The ash lens was initially thought to represent the top of a midden, but excavation showed that instead was a locus of at least two phases of intense burning activities. Following this determination, the original 2 x 2 m unit was expanded to a 4 x 4 m to incorporate as much as possible of the fire pit and a small, associated wall (fig. 3.3).



Figure 3-3 Unit 1, Layer B, levels 1 and 2, feature 01

This unit was excavated in two layers, A and B. The uppermost several cm of Layer A was an active layer of sandy silt, that gave way with depth to a mixture of sand and ash. Layer B corresponded to the use of the hearth (Feature 01), and had fire discolored sediments of grey, red and brown, with inclusions of burned, medium sized stones. Layer B essentially consisted of the fill of Feature 01, and was excavated in four levels. Level 1 consisted mostly of a concentration of several medium sized stones, all showing evidence of having been exposed to heat, on the northeast margin of the hearth (fig. 3.4). This deposit may represent the periodic cleaning of the hearth, or rocks used as heating elements (stone roasting).

Level 2 consisted of the hearth's upper accumulation of charcoal and ash. The small wall identified from the surface also dates to this last phase of use of the hearth. The underlying Level 3 saw the proportion of soil in the fill increase, and the proportion of charcoal and ash drop drastically. The soil displayed a beige brown color, and was composed of a mix of sandy silt mixed with ash and flecks of charcoal (fig. 3.5).

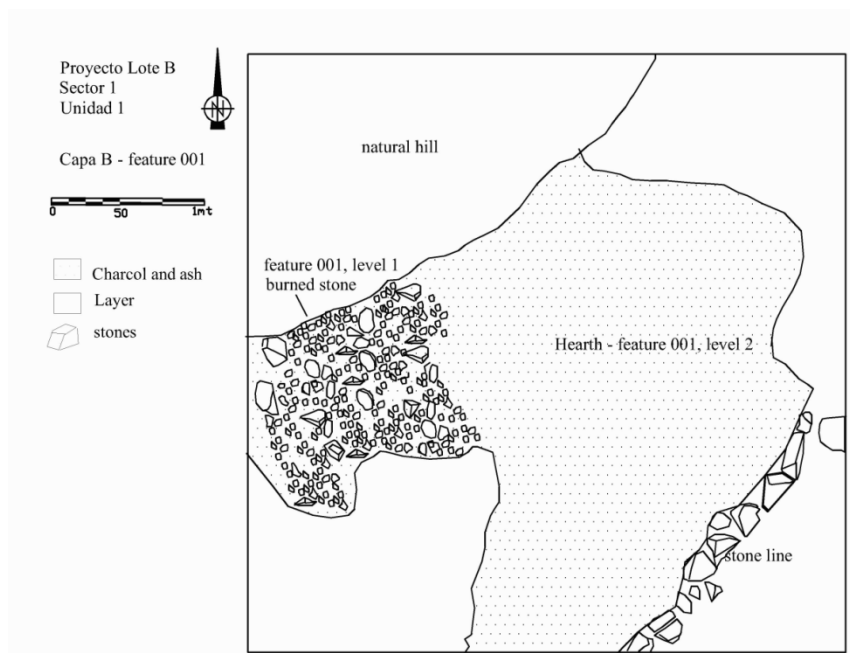


Figure 3-4 Unit 1, Layer B, Feature 01, levels 1 and 2

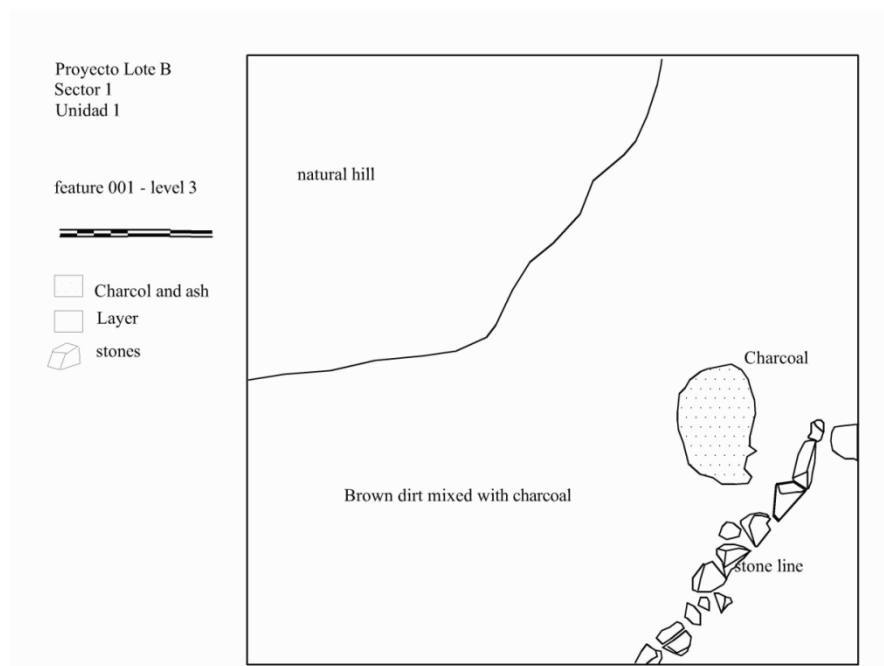


Figure 3-5 Unit 1, Layer B, Feature 01, Level 3

With Level 4, the proportion of charcoal and ash in the fill increased again, making up most of the matrix of the level, indicative of intense burning activity. present evidence of the area been used as a primary burning location. Outside the hearth we defined a tamped, “occupational surface” (fig. 3.6). Both the hearth and this surface pass under the wall of Level 2,

showing that it was added to the use of the feature later in time (fig. 3.7). The feature ended in sterile soil at the base of Level 4 (fig 3.8 and 3.9).

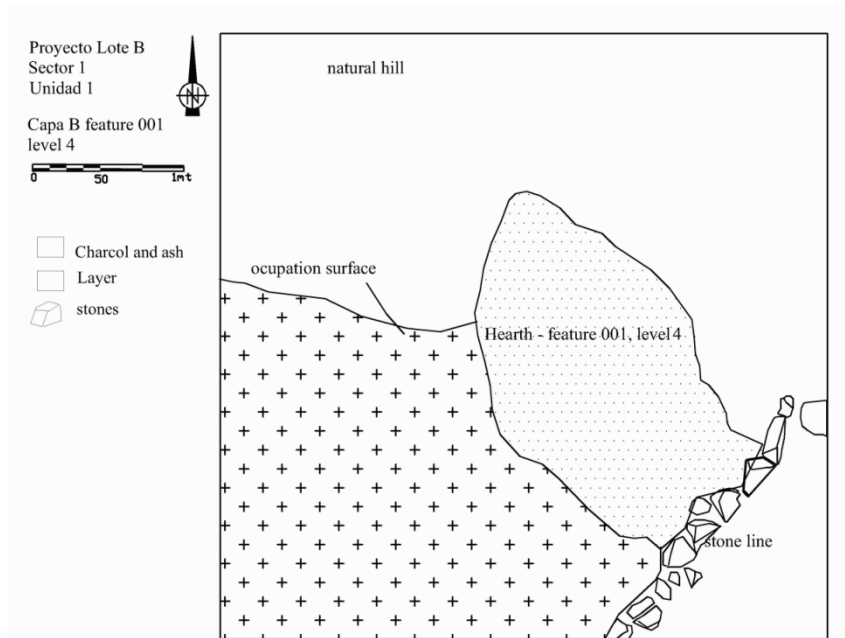


Figure 3-6 Unit 1, Layer B, Feature 01, Level 4



Figure 3-7 Unit 1, Feature 01 after excavations and associated wall

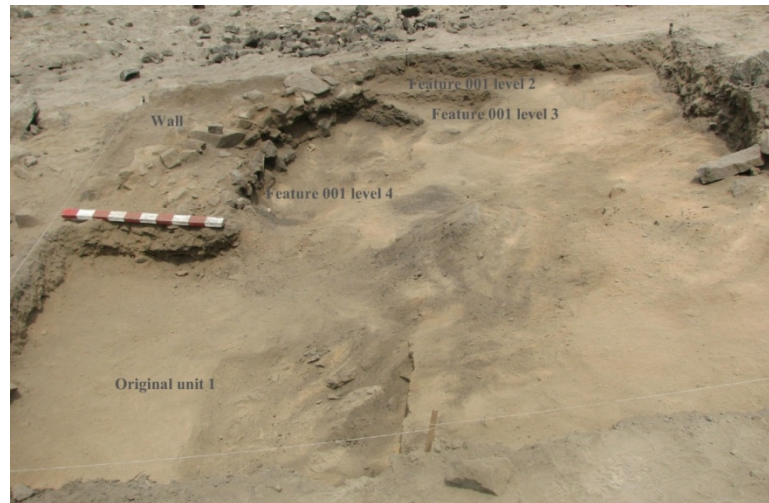


Figure 3-8 Unit 1, Feature 01 after excavation

Proyecto Lote B
Sector 1
Unidad 1
Profile South

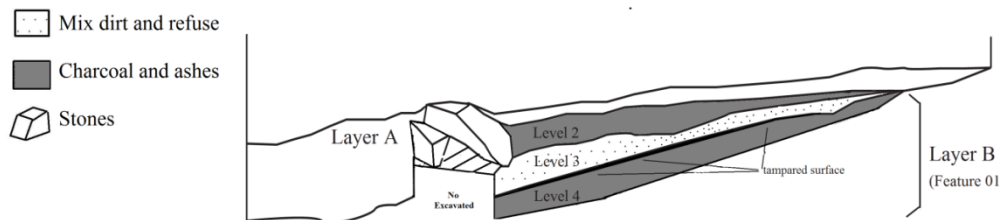


Figure 3-9 Unit 1, Profile South

3.4 EXCAVATIONS OF UNIT 2

This 2 x 2 m unit was located in the lower part of Sector 1 where an area of the surface with a darker coloration suggested the location of a midden (fig 3.10).

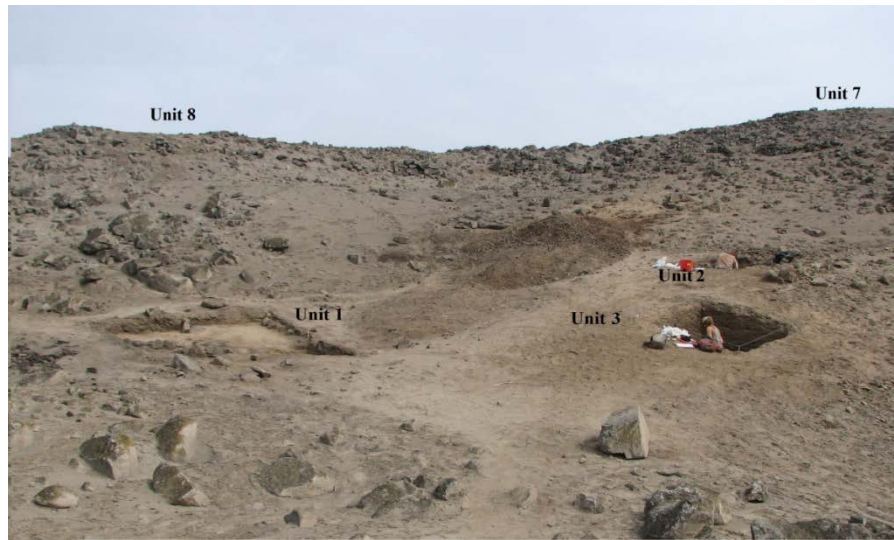


Figure 3-10 Sector 1 with unit locations

As soon as the excavation began, it became clear that this was indeed the location of a midden of very high artifact density. This excavation was done in five natural layers representing at least four major phases of deposition (fig. 3.11).

The surface Layer A was a mixture of loose, aeolian silt and sand.

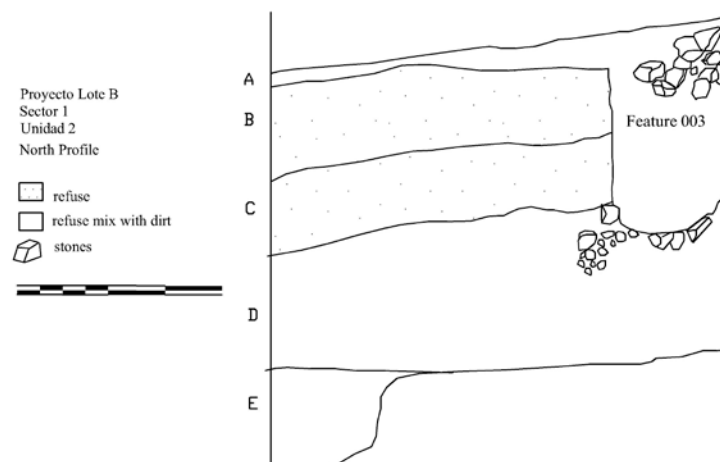


Figure 3-11 Unit 2, Profile North

The second phase of deposition (Layers B and C) corresponded to use of the area as a refuse deposit. Artifact density was very high, so that the matrix was composed of roughly 60% artifacts and 40% sand, silt, and decomposed organic matter. The refuse included sherds (some burned), botanical remains, animal bones, and shellfish remains.



Figure 3-12 Unit 2, Profile North, Feature 03

3.4.1 Feature 03

During the excavation of Layer B, a burial of a child of about 7 years age (Feature 03) was discovered (fig. 3.12). The mouth of the tomb was marked by a cluster of medium size stones that had capped or collared the tomb in Layer A. This stratigraphic position indicates that the burial was made after the abandonment of the midden (and perhaps even the site). The individual was in a seated, flexed position, wrapped in coarse cotton textiles (much of which was not preserve), tied into a bundle with twisted vegetal fiber cords.

The individual was facing the northeast with a *mate* gourd as the only preserved grave good. Under the individual, perhaps with the goal of keep the bundle in position was a cluster of stones similar to the ones identified at the burial's mouth. This burial pattern of a flexed bundle with gourd grave goods has been long seen as an "intrusive" Middle Horizon trait for the Lima complex area (Jijon y Caamaño 1949; Stumer 1954; Kaulicke 2000; DeLeonardis and Lau 2004).

What distinguished Layer B from the underlying Layer C was a higher total sherds density, and a lower relative proportion of decorated sherds. The pottery styles in each suggest a Late Phase date for both layers.

The earliest cultural phase of occupation (Layers D and E) represents a period before this locus was used as midden. These layers were mostly sandy silt with artifact inclusions. Below Layer D, most of the unit began to reveal traces of the orange sterile soil typical for the site, with only a small section in the western part of the unit showing cultural remains. This resulted from the natural hill having been cut sharply to create a terrace, indicating that the hill had been transformed intentionally at the beginning of the Layer E occupation. Layer E presented a matrix similar to Layer D, brownish-beige in color, only slightly darker, with silt the major soil component. We were only able to excavate 45 cm deep in Layer E, so that sterile soil was not reached throughout the entire unit (fig 3.13).



Figure 3-13 Unit 2, Profile South

3.5 EXCAVATION OF UNIT 3

Unit 3 was a 2 by 2 m unit located a short distance from Units 1 and 2 (fig 3.9), and placed to expose the same midden deposit as Unit 2. Overall, the section of midden excavated in Unit 3 had even a slightly higher artifact density than that of Unit 2. This difference may have been the result of Unit 3 being located slightly down slope from Unit 2.

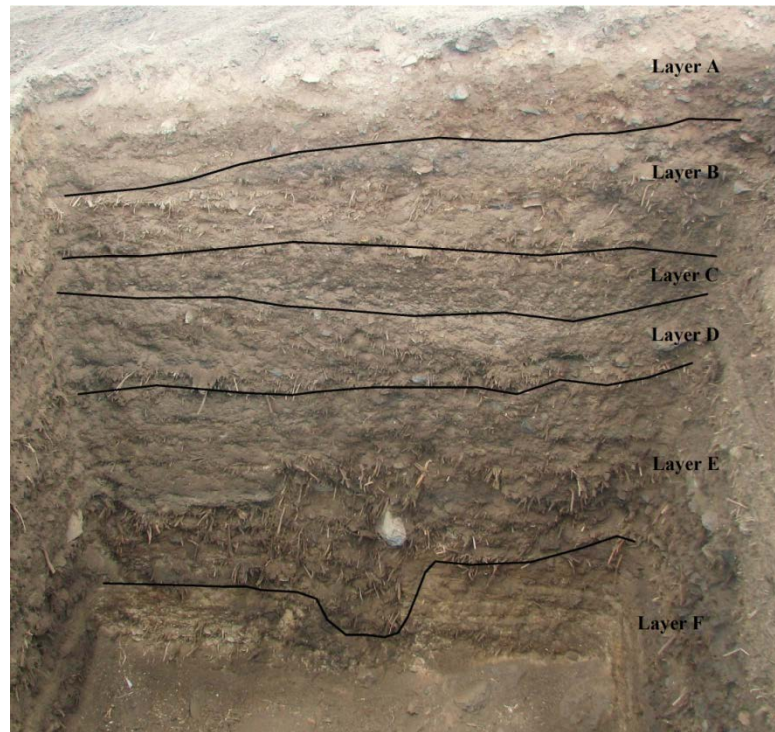


Figure 3-14 Unit 3, Profile West

Unit 3 was excavated in six natural layers, representing five phases of deposition (fig.3.14 and 3.15). Layer A was the usual, loose, orange, aeolian deposit of silt and sand. Layer B was a midden deposit, including high proportions of decorated ceramics, a few items of personal adornment (fig 3.24) and remains of plants, animals, and shellfish.

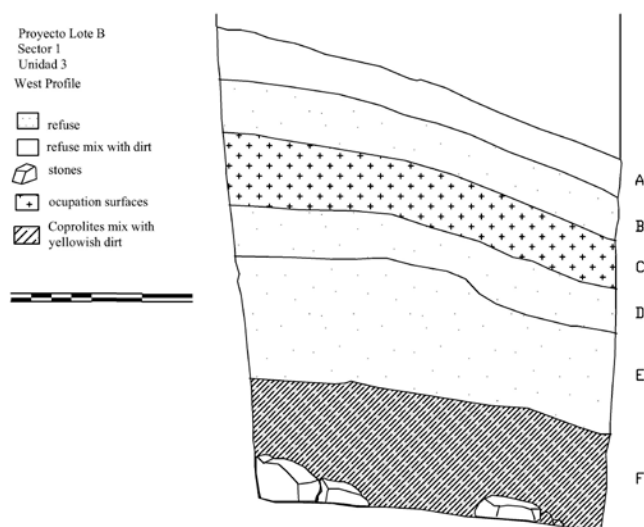


Figure 3-15 Unit 3, Profile North

The midden Layer B had accumulated on a tamped, outdoor occupational surface on which artifacts were lying flat. This proved to be the uppermost of a series of at least five superimposed occupational surfaces (Layer C), each of which was marked by organic, gray staining (fig. 3.16).

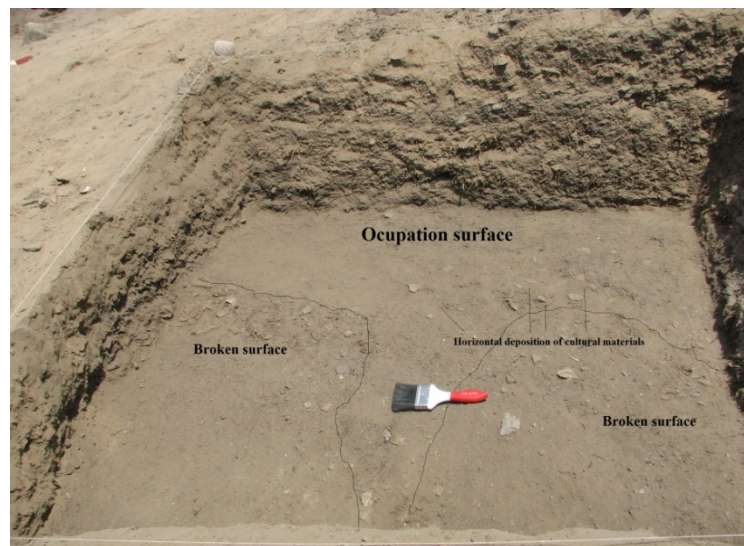


Figure 3-16 Unit 3, Layer C, Occupational surface

Underlying these surfaces was a second midden deposit (Layers D and E), that, in general terms, resembled the Layer B midden but with a lower density of ceramics. Both Layers D and E were largely made up of refuse, with a small amount of sandy silt matrix. Layer E was slightly darker (higher in organic content) than Layer D.

Layer F consisted of a compact, yellowish mixture of some silt, sand, and lots of camelid dung (fig 3. 17). The density of this camelid dung stratum could indicate this area had been used as a corral. The underlying layer (F) was the usual, bright orange sterile soil.



Figure 3-17 Unit 3, Layer F – Top of the llama dung deposit

3.6 EXCAVATION OF UNIT 7

This unit was situated to investigate the stratigraphy and function of the Sector 1 architecture. The unit was located in the crest of the hill, directly above Units 2 and 3 (fig 3.18), and the refuse of the latter units may have come from occupation of this building.

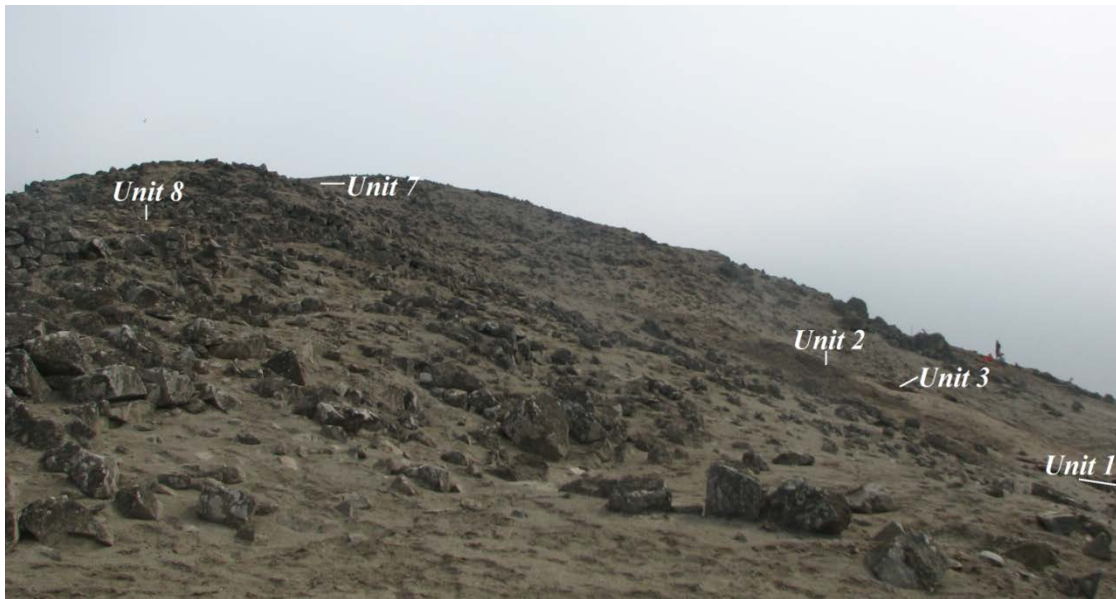


Figure 3-18 Sector 1 – Excavations Units

The unit was initially situated to follow the layout of a small room on the hill top. However, excavation showed the room floor was almost complete destroyed by wind deflation, so to try to learn more about floor features in the area, we extended the excavation to the adjacent room. This second room was only partially preserved because part of it had collapsed down slope. The first small room was designated Room West, and the second room was designated Room East (fig. 3.19).

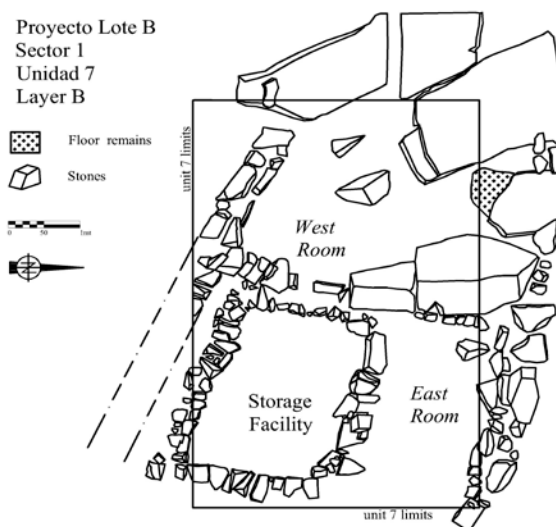


Figure 3-19 Unit 7, Layer B

In Room West, only a few sections of floor had preserved, close to the walls. These walls, themselves, were superficial, representing the base course of the walls. Where wall preservation was better, there were two stone courses preserved, but the thinness of the wall suggests that the upper portions of the wall were likely made of perishable materials.

Under the floor fragments was a sandy silt and gravel fill deposited for the purpose of leveling the terrain for the floor. Just a few cm of excavation through this fill revealed large stone outcrops of the natural hill, with no additional cultural deposits (fig 3.20).

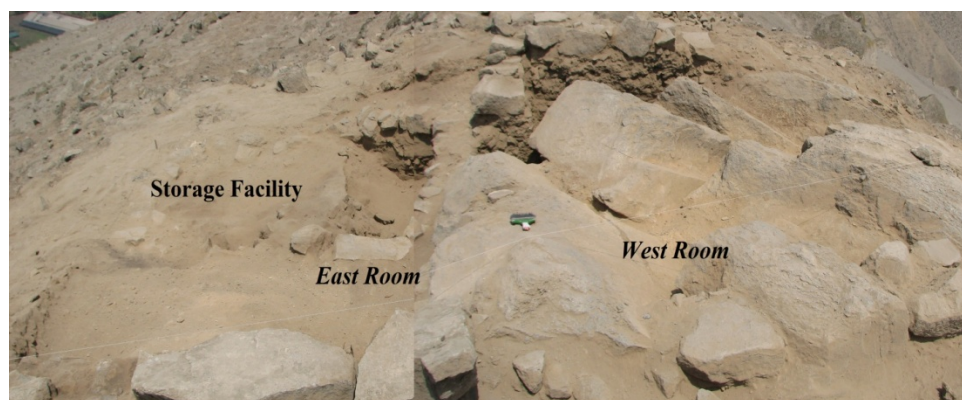


Figure 3-20 Unit 7 after the excavation of the first layer

The East Room showed a similar pattern of erosion and deflation of the architecture, with only the foundations of stone walls present. Below Layer A (the superficial accumulation of aeolian sand), a small subterranean room was defined inside the East Room. The walls of this subterranean room were built with stone and mortar, and covered with a mud plaster. The bottom of the room had a smooth, well finished floor. This small subterranean room is interpreted as a storage facility inside the East Room. At some point the storage facility was subdivided in two, and a second floor was put over the original one (fig. 3.21). The remainder of Layer B was basically composed of chunks of mud mortar, and small and medium sized stones in a matrix of beige, sandy silt. Layer C consisted of the material filling the small storage room. The floor of the storage space was clean, and Layer C represents material accumulated inside the

storage room after the abandonment of the area. Layer D was the ditch made into the hillside to create a surface for the storage structure.



Figure 3-21 Storage structures of Unit 7

This ditch was easily seen during excavation, because of its distinctive grey color fill. The stratigraphy shows that the ditch was filled after the construction of the storage facility, but before the construction of the East Room walls, as the base of these walls pass over the level of the ditch (fig 3.22). The storage room was built before the East Room, but continued to be used after the East Room was construction, and it is possible that the sub-division of the storage facility relates to the ultimate phases of use.

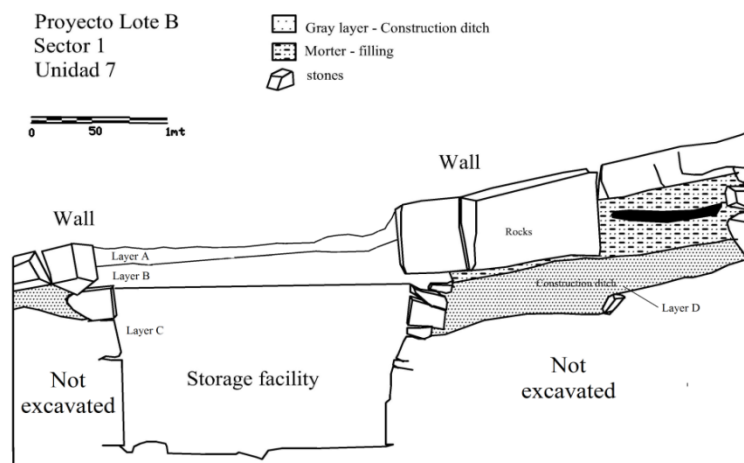


Figure 3-22 Cut between East and West Rooms – Storage facilities and construction ditch

3.7 EXCAVATION OF UNIT 8

Unit 8 was placed in another area of the architectural complex (fig. 3.18). As in Unit 7, erosion and deflation had destroyed much of the final occupation at this locus. Floor remains were found just below the surface, associated with the foundation stones of the walls. A semi subterranean storage structure was found, built of small stones in mortar, and faced with clay plaster (3.23). The floor or bottom of this storage room was clean.



Figure 3-23 Unit 8 storage facility

3.8 CONCLUSIONS - SECTOR 1

Sector 1 is composed of two areas. The lower area, of spacious terraces and plazas, was used for outdoor activities (Unit 1) and refuse disposal. The upper area, the architectural complex includes storage structures. Although no direct evidence for dwelling spaces was found in the architectural complex (where only two test pits were placed), the nature of the architecture and associated midden deposits argue that the storage spaces were, in fact, within a residential complex.

Unit 1 evidenced two periods of time when the area was used for large scale burning/cooking activities (Feature 01), both periods in the Late Phase. The stratigraphy here is consistent with an expansion of the Sector 1 complex (and associated activities) at the time of the Late Phase. Unit 2 exposed several phases of heavy midden deposition in the Late Phase (see Chapter 7), after the earliest use of the locus as an outdoor activity area in the Middle Phase. The middens show an increase in the proportion of decorated ceramics through time, together with items of personal adornment objects (Fig 3. 24).



Figure 3-24 Objects for personal adornment found at Sector 1

The changes seen in Units 2 are consistent with the others in Sector 1 that point to significant changes in Sector 1 (and Lote B) site structure with the Late Phase. These changes, including the increase in refuse deposition, are concomitant with the construction of storage facilities on the surrounding crest. The earliest occupation of Unit 3 reflects the presence of camelids at the site (Early Phase), and Unit 3 may, in fact, have been placed in a place where llamas were corralled. Following this, the locus alternated between use as a heavy midden, and an area of outdoor activities (as seen in the sequence of superimposed, tamped surfaces), with the midden artifact assemblages consisting largely of food preparation/cooking materials.

The only two units (7 and 8) placed within the Sector 1 building exposed small, specialized storage constructions within storage rooms, dating to the latter portion of the Late Phase. Unfortunately, these were clean of associated artifacts, so we do not know what was being kept in these spaces.



Figure 3-25 Projectile point found in Unit 3, sector 1

4.0 EXCAVATION OF SECTOR 2

4.1 INTRODUCTION

Sector 2 is located near the top of Cerro Manchay, just north of Sector 1. Excavation in this sector consisted of five test units (Units 4, 5, 6, 9 and 10) that explored midden and domestic architectural contexts. This chapter will describe the stratigraphy and features. The results of analysis of the artifact assemblages are presented in Chapter 7.

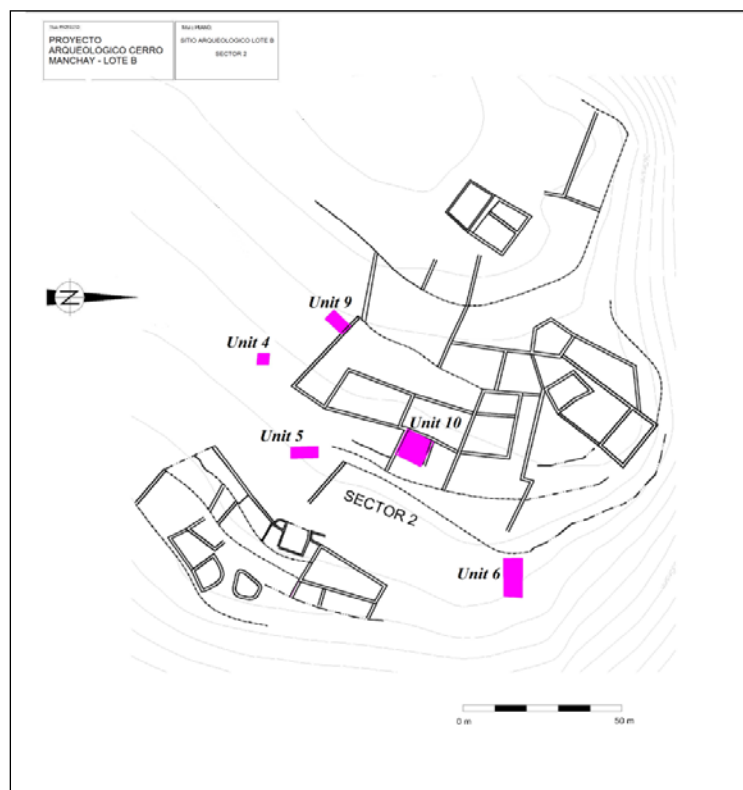


Figure 4-1 Sector 2

4.2 DESCRIPTION

Sector 2 occupies the upper northeastern slope of the hill, overlooking the valley below. Much of the extant architecture lies over a set of artificial terraces. These terraces are divided by walls to rectangular rooms. We can identify two major room complexes separated by an open area, also on a terrace, that probably corresponds to a court or plaza between the two architectural units (fig. 4.1).

The walls visible on the surface were made with small stones from the hill, set in mud mortar. The widths of these walls average 30 cm, and the tallest standing sections are only 20 - 30 cm. While the surface has been subject to deflation, the architecture is partially covered aeolian sand (fig 4.2).



Figure 4-2 Panoramic view of sector 2

4.3 EXCAVATION OF UNIT 4

Unit 4 was situated between Sectors 1 and 2, but closer to the larger room complex of Sector 2. The 2 x 2 m unit was placed to investigate a small area where the surface of the site appeared slightly mounded. The unit reached sterile soil after only two layers. Layer A was the active layer of aeolian sandy silt, light brownish beige in color, typical of the surface of the site.

Layer B consisted of a slightly darker brown sandy silt, with only a few cultural inclusions. Below this layer, was the stony, compact, yellow sterile soil. A small sounding confirmed that this was sterile.

Proyecto Lote B
Sector 2
Unidad 4
Profile North

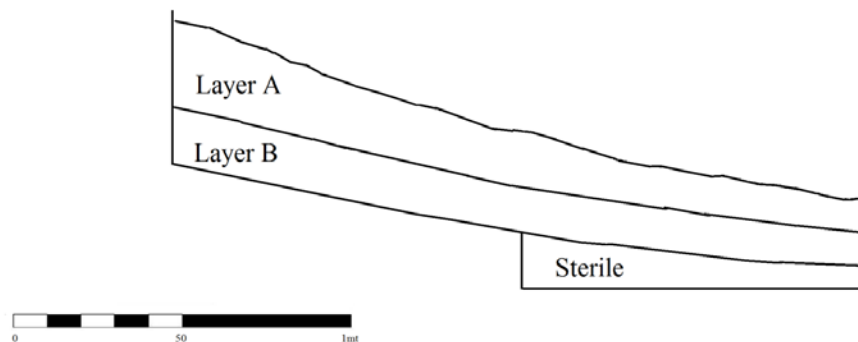


Figure 4-3 Sector 2, Unit 4 Profile North

4.4 EXCAVATION OF UNIT 5

Unit 5 was placed in an open, plaza-like space between the two building complexes. Again, the unit was situated on a slightly mounded area that looked suspiciously like refuse accumulation.

Unit 5 initially was a 2 by 2 m pit, but after the excavation of the first levels, we found abundant refuse and decided to expand it into a 2 x 4 m trench. The refuse concentrations were scatter throughout and each displayed a very high density of cultural material.

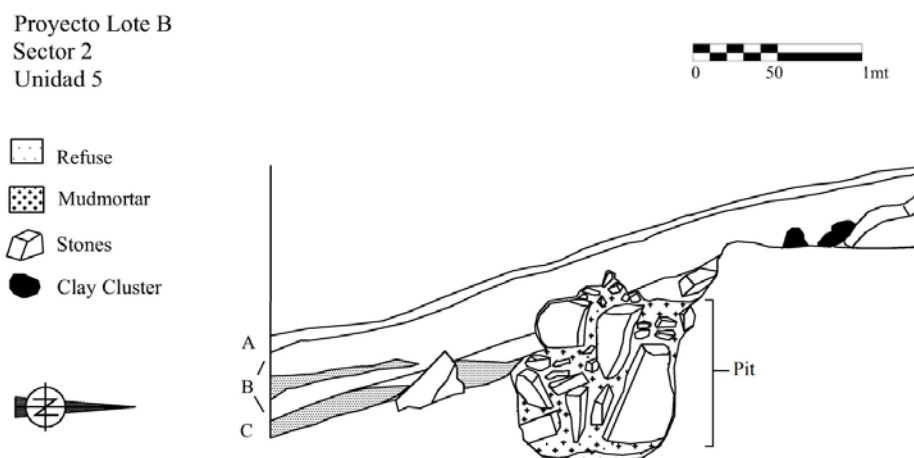


Figure 4-4 Sector 2, Unit 5, Profile West

The excavation revealed three major depositional layers (fig. 4.4). Layer A was the familiar mix of loose sand and aeolian material. Layer B had more loam and higher organic content, was dark brown in color, and contained a high density of artifacts. Layer B is interpreted as the midden deposit. Within the layer we were able to identify discrete lenses or concentrations of material that may correspond to individual dumping events (fig.4.5).

Layer B contained a small circular pit feature made of stones in mud mortar. The extended into the sterile layer below, and some of the natural rock in this layer served as pit walls. The feature had Layer B fill, but on the bottom of the feature was a thick layer of what resembled water-lain sediment (fig 4.6, 4.7). This accumulation could be explained if the small structure was linked with water related activities, perhaps as a water cistern. To the side of this pit we found the remains of two additional pits, forming a line. These were very poorly preserved but what was level resembled the feature excavated, suggesting a row of cisterns.



Figure 4-5 Sector 2, Unit 5, Layer B

Layer C was the usual sterile gravelly yellow soil found elsewhere at the site, although the surface of this layer here exhibited some intrusive refuse pits with abundant sherds (fig 4.6). Among the artifacts were many fragments of large vessels that probably served as liquid containers, animal bones and shellfish, charcoal and other plant remains (see Chapter 7 for more details).

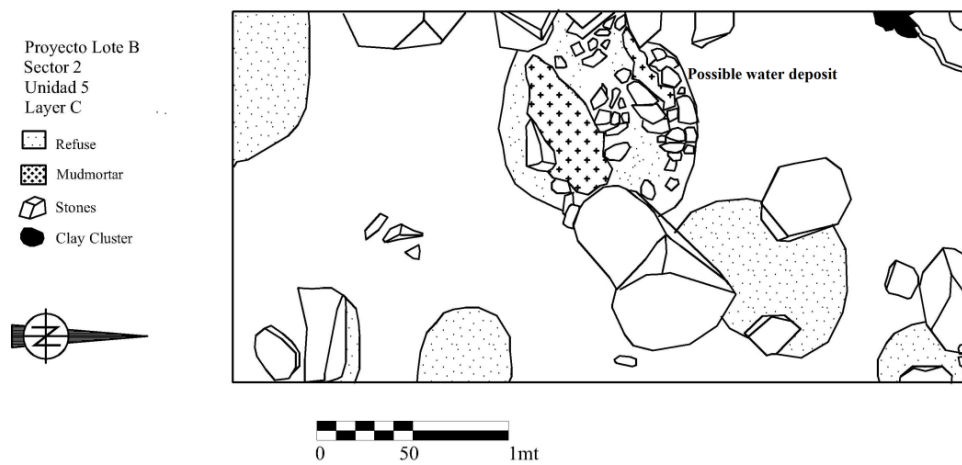


Figure 4-6 Sector 2, Unit 5, Layer C



Figure 4-7 Sector 2, Unit 5, possible cistern after excavation

4.5 EXCAVATION OF UNIT 6

Unit 6 was placed in the northeast flank of Sector 2. The locale was selected for excavation because of a dark coloration on the surface suggesting intensive burning activities. The initial test pit of 2 x 2 m was later extended to the west four meters, creating a 6 by 2 m trench. Artifact density in this unit was high, characterized by large quantities of charcoal, burned clay fragments and small pointed wooden sticks with burning marks at the point, and by relatively little food plant and shellfish remains (see Chapter 7 for in detail discussion). The unit was excavated with eight natural levels that revealed three distinct occupational episodes (fig 4.8).

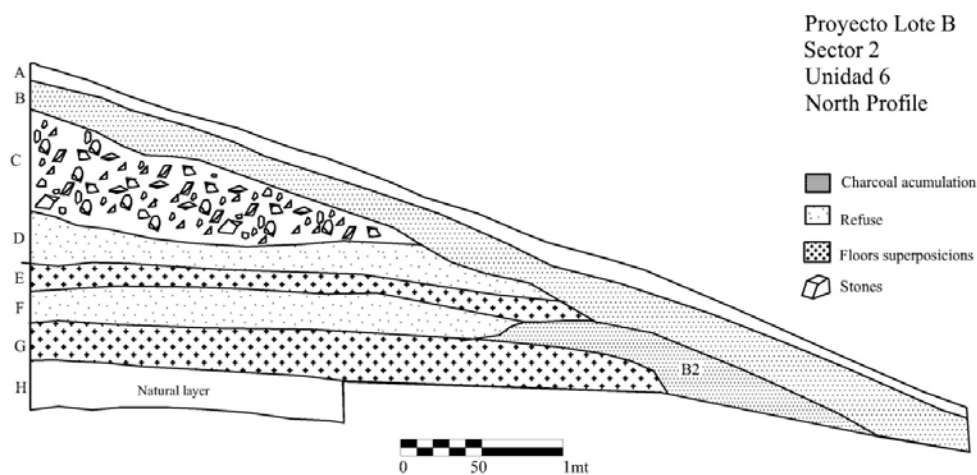


Figure 4-8 Sector 2, Unit 6, Profile North

Layer A was the characteristic sandy silt aeolian deposit, but the amount of charcoal here created a more dark gray color in place of the usual light brownish beige seen elsewhere. Layer B was a dark gray, organic refuse layer of burned material, with such dense charcoal, ash, ceramics, wood, tree branches, and small pointed sticks that there was little in the way of soil matrix (fig. 4.9).



Figure 4-9 Sector 2, Unit 6. Layer B

It was during the excavation of this layer that the unit was expanded 4 meters to the west to become a 2 for 6 m trench. After the expansion of the unit, we determined that Layer B in the initial 2 by 2 m unit was made up of two distinct layers, differentiated by their level of compaction, with the lower layer (Layer B2) being much more compact.

At the base of Layer B2 was a layer of medium sized stones, surrounded by clay with white and reddish colors, as a consequence of having been exposed to fire (fig. 4.10). This Layer C contained many sherds, but very little charcoal.

The underlying Layer D was a fill stratum. It had markedly less stone inclusions than the layer above (fig 4.11), and while overall artifact density was lower, the assemblage was more varied. Refuse in this layer include sherds, charcoal, shellfish fragments, and plant remains.



Figure 4-10 Sector 2, Unit 6, Layer C



Figure 4-11 Sector 2, Unit 6, Layer D

Layer D overlay a tamped, occupational surface, Layer E (4.12), which had artifacts lying flat upon it. Layer E was a compact, brown soil.



Figure 4-12 Sector 2, Unit 6, Layer E, Occupational surface

Layer F was similar to Layer E, but less compact, and without all artifacts in a horizontal position. This was also a fill layer over the Layer G floors occupational surfaces. Layer G included at least two surfaces, exhibiting organic staining and charcoal and ash lenses (fig 4.13). In contrast to the overlying stratum, this layer contained relatively few ceramics but significant quantities of botanical remains, including large numbers of burned branches and sticks, much like Layer B2. It is possible that Layer B2 represents discard from the Layer G occupation, the earliest occupation exposed in Sector 2 (fig 4.14). Below Layer G was the usual sterile soil (Layer H).



Figure 4-13 Sector 2, Unit 6, Layer G



Figure 4-14 Sector 2, Unit 6, Northwestern view of unit 6 after excavation

4.6 EXCAVATION OF UNIT 9

Unit 9 (2 x 4 m) was placed to explore the relation between an outer wall and the open, plaza-like area. This unit was located in the southwest of Sector 2, at a point where the wall comes close to a deep incline in the slope, forming a small “alley”. Inside this alley was a slightly raised area likely to represent refuse accumulation.

Excavation took place in three levels, exposing at least two occupations. Layer A was a active surface layer of light brownish-beige, aeolian sand. Below this was a midden layer (B), consisting of a brownish-beige, sandy silt associated with the structure’s use. In some places the refuse in Layer B was deposited against the wall.



Figure 4-15 Sector 2, Unit 9 after the excavation of Layer B

On the surface of Layer B was a small concentration of stones capping a grave (Feature 004). This tomb was clearly intrusive, a post-occupational burial, made after the abandonment of the structure. Below Layer B was a second refuse stratum, Layer C, at the base of which were four patches of a floor, running more or less five centimeters below the stone wall. This floor

was made and used prior to the construction of the walls visible in the surface. Layer C is associated with this floor (rather than with the building).



Figure 4-16 Sector 2, Unit 9, End of Layer B

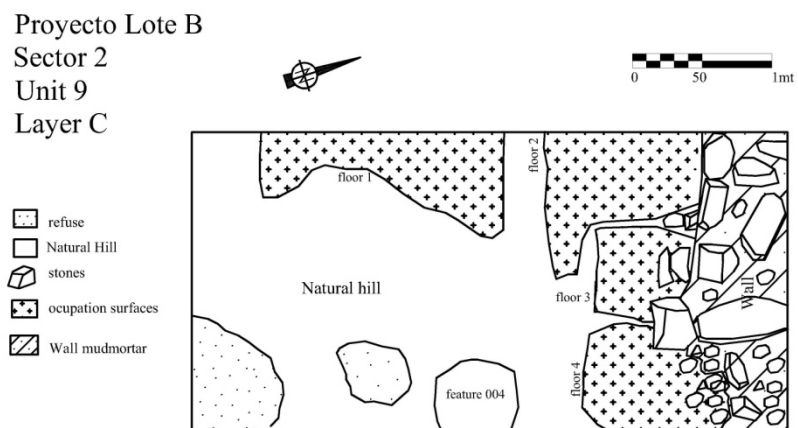


Figure 4-17 sector 2, Unit 9, Layer C

Level C ended with the distinctive yellow sterile soil, with small circular refuse deposits in the western part of the unit, associated with charcoal staining (fig. 4.16, 4. 17).

There was no evidence of walls associated with the Level C floor, save for a small channel between floor patches #2 and #3, that may have functioned as a trench to foot perishable architecture (fig. 4.18).



Figure 4-18 Sector 2, Unit 9, Detail canal in Layer C's floor

Excavation continued through the floors patches (patch #4 in figure 4.17) between the floor and the wall (fig 4.19). This excavation revealed a second floor, visible only under the wall, and not running across the entire unit.

Proyecto Lote B
Sector 2
Unidad 9
Profile North

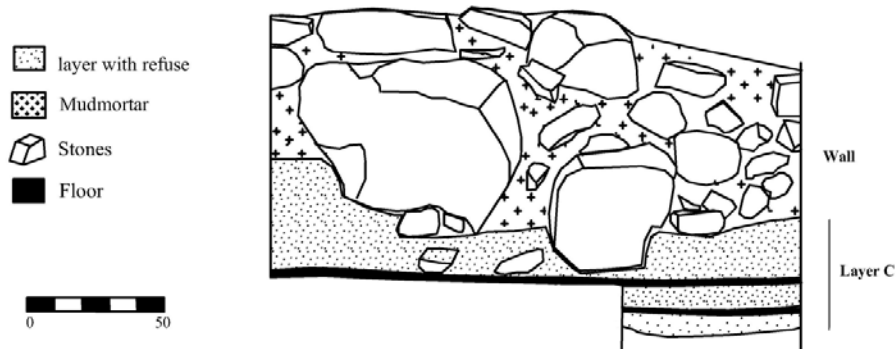


Figure 4-19 Sector 2, Unit 9, Profile North, floor superposition

4.6.1 Feature 04

This was an intrusive tomb containing two individuals. The uppermost individual, an infant of about 9 months age, was discovered at the level where the natural soil began (fig.4.20). The individual had probably been wrapped in textiles and placed in a seated, flexed position.



Figure 4-20 Sector 2, Unit 9, start of the Feature 09



Figure 4-21 Sector 2, Unit 9, feature 04, Individual 1

Under this first individual was the skull of a second individual, around 3 - 4 years of age, and also buried as a bundle in a seated and flexed position (fig. 4.22). This individual was facing northeast, and two small gourds (*Lagenaria sp.*) had preserved as grave goods (fig. 4.21). In stratigraphic position and burial treatment, this grave resembled that found in Unit 2 of Sector 1.



Figure 4-22 Sector 2, Unit 9, Feature 04, Individual 2



Figure 4-23 Sector 2. Unit 9, Feature 04, Detail of Individual 2

4.7 EXCAVATION OF UNIT 10

To investigate the interior of the larger building complex, an internal room was selected for clearing because of its good preservation and architecture (and a grinding stone) visible on the surface. The room was contained in a quadrangular terrace of 10 x 8 m. The room had been divided into at least two spaces, and we chose to excavate the better defined of these, with an exploratory unit of 5 x 5 m oriented along the walls, and covering most of the room (fig 4.24, 4.25).



Figure 4-24 Sector 2, Unit 10 before excavation

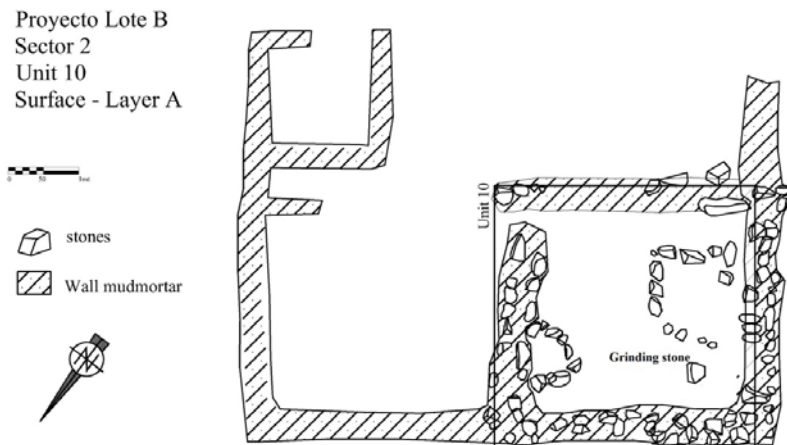


Figure 4-25 Sector 2, Unit 10 general map

The stone alignments inside the room, together with the grinding stone, were part of an eroded-out occupation that had destroyed the last floor of the structure, and the stone alignments visible on the surface consisted of only a single course. However, below this, were the remains of five earlier floors.

Each of the five occupational phases consists of a floor with features filled with soil and organic remains. Three grinding stones were recovered from this sequence of floors (figure 4.26).



Figure 4-26 Sector 2, Unit 10, Layer B, grinding stone

After the excavation of the first layer (Layer A) of superficial soil, the remains of a floor (Layer B) were found. This Layer B floor was contemporaneous (at least partially) with the walls that are visible on the surface. This floor was made of tamped mud and was penetrated by several pits with animal bone and plant remains in the fill. A grinding stone, a small stone structure in the northern part of the room, and an area of charcoal accumulation were also associated with this occupation (fig. 4.27).

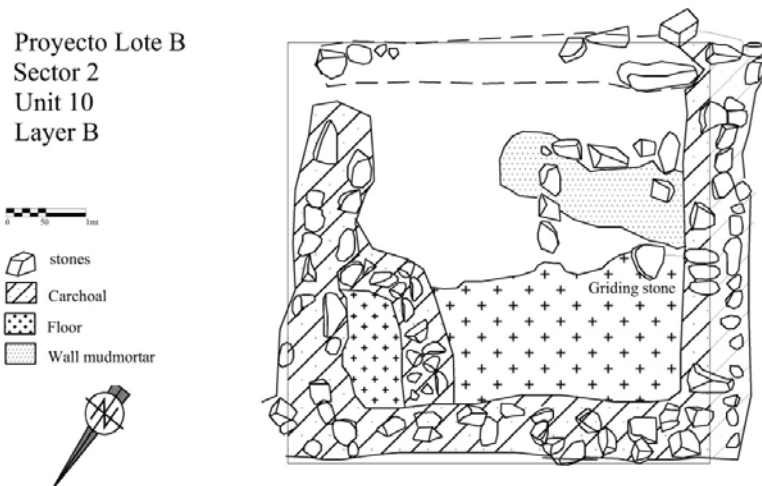


Figure 4-27 Sector 2, Unit 10, Layer B

Material on the floor included large quantities of plain and decorated sherds, shell fragments, and botanical and faunal remains (fig. 4.28). The average size of the artifacts in this level was significantly less than the average size of artifacts found in the open areas of Sector 2, suggesting a higher proportions of primary refuse, especially of food preparation and consumption activities.



Figure 4-28 Sector 2, Unit 10, Layer B

Another floor (Layer C) was found below, also showing a number of features such as pits and possibly post holes (fig 4.29). This floor ran about 5 cm below the room walls, and is not associated with the walls.



Figure 4-29 Unit 10, Layer C

Layer C was an occupational layer with a concave, basin-like feature (C1) in the southwest corner of the room (fig. 4.30). This concavity was probably used to seat the medium sized vessels.

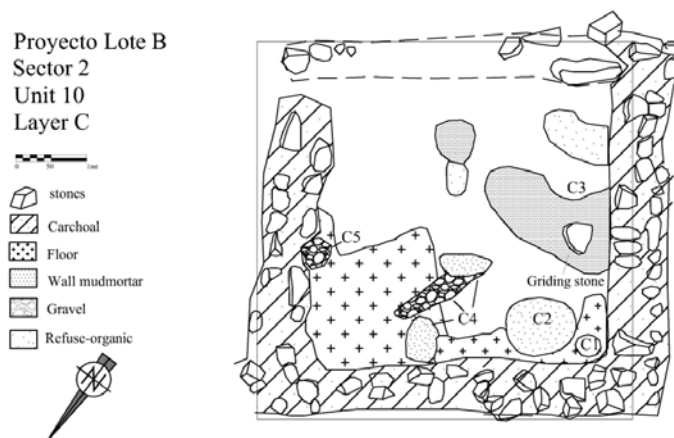


Figure 4-30 Sector 2, Unit 10, Layer C map

Close to this concavity was circular feature (C2) penetrating the floor and filled with soil containing a high density of botanical remains, shellfish fragments, and ceramics. There was no charcoal or ashes in this pit that would suggest a hearth function.

Almost exactly under the *batan* or grinding stone of Layer B, we found a pit (C3) filled with a mix of soil, gravel, several articulated llama feet, and charcoal. This fill could correspond to refuse accumulation of cooking activities.

Near the unit's center were several holes in the floor (C4), two of which were filled with organic refuse, and one was filled with fluvial gravel. These pits were located above a series of small features excavated as part of Layer D, made of small stones, that were intentionally covered with gravel and refuse, before the construction of the Layer C floor. The last feature in the Layer C floor was a small pit (C5) filled with small gravel of fluvial origin.

Layer D represents another floor, and occupation phase. In this level, toward the terrace's retaining wall, the sterile soil started to appear. This finding indicates the the early flat surface used for residential occupation was smaller than the surface created in later occupations (Fig. 4.31).



Figure 4-31 Sector 2, Unit 10 Layer D, NW view

Layer D floor/level shows several contexts arguably contemporaneous with the main floor (Layer B) of the building (fig. 4.32). In the middle of the unit the C4 feature contained, but in this level was designated D1. At this depth, the feature was clearly delineated by small stones, and contained another grinding stone. Our interpretation is that this pit was used through multiple episodes of reflooring in the structure.

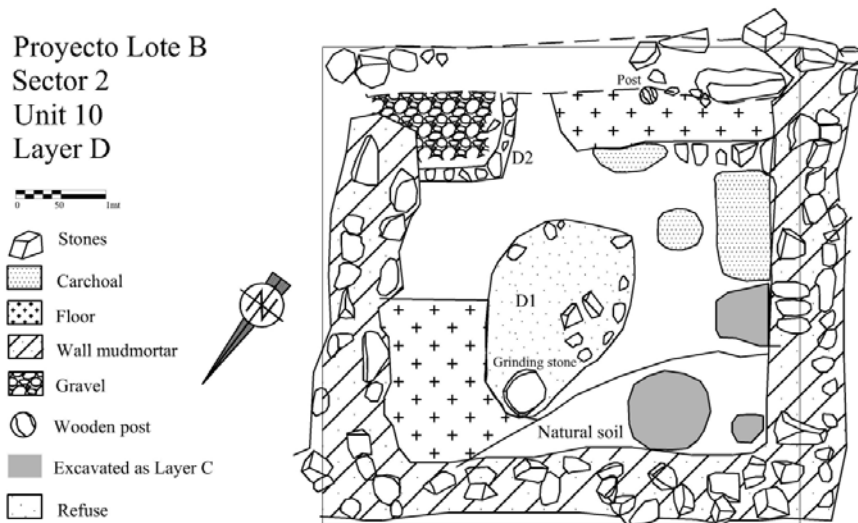


Figure 4-32 Sector 2, Unit 10, Layer D, Map

In the southwest corner of the room a small rectangular, bin-like structure was discovered, filled with orange gravel, similar in color to the sterile soil at the site. There were no artifacts in the fill, and we cannot determine the feature's function.

At the southeast part of the unit, a short stone alignment was found in association with a circular piece of wood inserted into the mud floor. This likely represents the post and wall foundation of an internal partition. Near this stone alignment there were three shallow, depressions filled with dark ashes and charcoal accumulation (fig 4.33).



Figure 4-33 Sector 2, Unit 10, Layer D, SE view

The underlying Layer E exhibited two, parallel stone alignments that may represent an entrance (fig. 4.34). The stone lines are 20 cm apart. Between them we found another wood post, and a section of floor representing a repair of the floor or maintenance of the proposed entry (fig 4.35).



Figure 4-34 Unit 10, Layer E, SE view

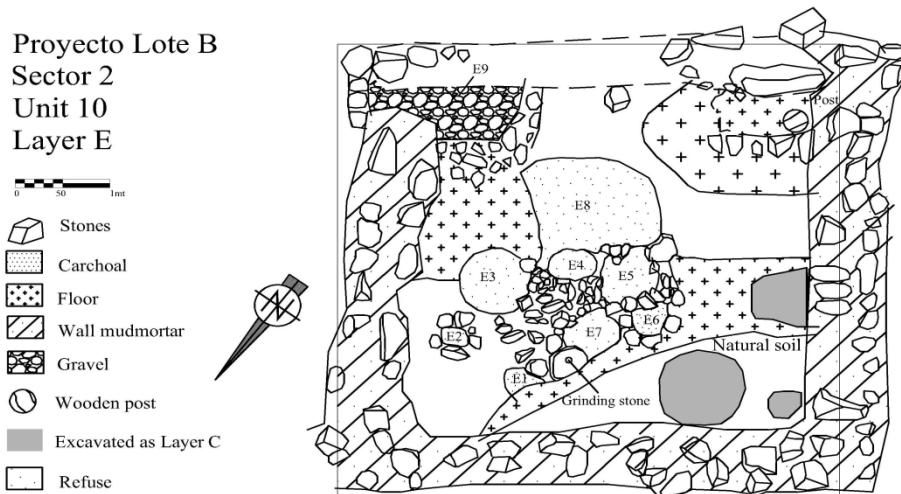


Figure 4-35 Sector 2, Unit 10, Layer E, map

The feature near the center of the unit designated C4 and D1 in this level ended as a cluster of small pits, some with stone walls forming their walls (fig 4.36).



Figure 4-36 Sector 2, Unit 10, Layer E, detail

The pits had a similar fill including highly fragmented shells, ceramics, and extensive botanical remains. It is possible this feature was associated with the grinding stone of Layer D.

The general small size of the artifacts and the botanical remains suggest a fill stemming from food production.

After the excavation of Layer E, we found the remains of two oval features dug into sterile soil, with walls formed of small stones set in mud plaster (fig. 4.37).



Figure 4-37 Sector 2, Deposits in Unit 10, Layer F

These two sub-floor features had been completely sealed over by subsequent refloorings. Associated with them were wooden post, a grinding stone, and some patches of floor. Most of Layer F consisted of the sterile yellow soil, so this floor and features represents the first occupation of the area (Fig. 4.38).

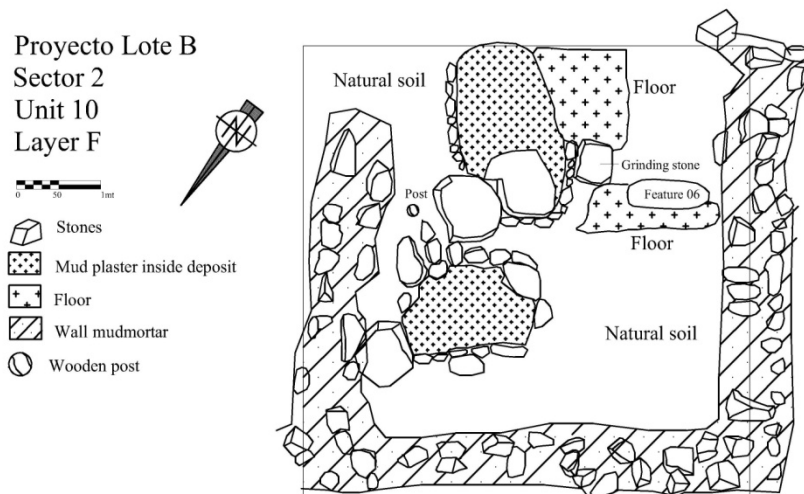


Figure 4-38 Sector 2, Unit 10, Layer F

4.7.1 Feature 06 -

Feature 06 was the burial of a child (1 year \pm 4 months age), in an extended position, facing south (fig. 4.39). Burial had evidentially taken place in a shallow pit rather than a deep tomb. Part of the reed wrap that had encased the burial was preserved under the individual (fig. 4.40). Extended burial with reed wrapping has been proposed as a typical Lima mortuary practice, defined for the Rimac and Chillón Valleys (Kaulicke 2000). This burial differs from those of Units 2 and 9 in body orientation and stratigraphic position. Whereas the former burials appear to have been intrusive, this grave appears to been dug before or during the first occupation.



Figure 4-39 Sector 2, Unit 9, Feature 06 - Individual



Figure 4-40 Sector 2, Unit 9, Feature 06 – Individual, wrap detail

4.8 CONCLUSION - SECTOR 2

Sector 2 proved to be a residential area, made up of two large architectural complexes separated by a plaza-like area. The features and artifacts assemblages from the excavations in midden and internal spaces are all consisted with domestic tasks. The architectural visible on the surface was constructed relatively late in the occupation of Sector 2, but the excavations

showed a long sequence of prior domestic occupation (at least four earlier occupations in Unit 10 and three in Unit 6), and floor fragments, refuse pit features, postholes, and grinding stones were recorded from these earlier occupations.

The earliest burial (in Unit 10), and the relatively high proportions of decorated pottery excavations place the Sector 2 occupations entirely within the Lima period, with Units 6 and 10 spanning the Early through Late phases, and Units 4, 5, and 9 representing an expansion of domestic occupation in the sector in the Late phase

5.0 EXCAVATION OF SECTOR 3

5.1 INTRODUCTION

Sector 3 was a non-residential section of the site on which two compounds of non-domestic architecture and public spaces were constructed. Excavation consisted of four test units intended to determine the activities associated with the compounds. Units 11 and 13 were 2 x 2 m units located in outdoor midden deposits. Unit 12 was a 6 x 2 trench located in the center of the smaller architectural compound, and Unit 17 (5 x 10 m) was a shallow clearing of superficial deposits in the monumental architectural block, as my permit did not allow us to explore monumental architecture.



Figure 5-1 Sector 3 general map

5.2 SECTOR 3 – DESCRIPTION

Sector 3 was constructed over two terraces located on the south-east slope of the hill, facing into the Lurín valley. These two terraces divide the sector into two major compounds (fig 5.1). On the lower terrace was a smaller compound or building composed of 6 rectangular rooms. This compound had an adjacent artificially leveled and cleared area, free of surface architectural remains. Between the compound and the leveled area was a small depression located more or less at the middle of the sector. The depression proved to contain significant refuse accumulation.

On the upper terrace was an architectural compound composed of several sizeable plazas and small rooms. These architectural spaces were well-defined, with the floors of interior spaces lying at different levels. The level differences were produced using architectural fills composed of dirt and large stones. The intention was probably to give the building a staggered, multilayered view when seen from below.

The walls in both terraces were built with small stones likely coming from the rocky outcrops spread throughout the hill. These same rocks were used in the construction of the compounds. Although similar in materials, one architectural difference between the compounds was that the lower one has thinner walls (more or less 20 cm width) than the upper one (walls of more than 50 cm width). The abundant fallen wall stones amongst the larger compound indicate that the walls had originally stood significantly higher than we recorded (fig. 5.2).



Figure 5-2 Sector 3 Unit Locations

5.3 EXCAVATION OF UNIT 11

In was difficult to locate refuse areas from the surface in this sector. The upper terrace did not display any high density surface artifactual concentrations or dark colored area indicative of midden. In the lower terrace, to the north side of the smaller compound, we found on the surface a light artifact accumulation composed of sherds and botanical remains potentially indicative of major refuse accumulation underneath. The location of this accumulation, adjacent to the smaller compound and far removed from any other structure at the site, increased the possibility that this refuse was connected to the activities carried on in the smaller compound. Unit 11 was established to explore the composition and associations of this light refuse accumulation.

The 2 x 2 m test pit was excavated through three layers, representing a single occupational phase (Late Phase), and the refuse accumulation in this area was apparently produced in a

relative short period of time. Layer A was similar to the surface layer defined through out the site, consisting of a light brownish-beige sandy silt, mixed with refuse accumulation of aeolian and colluvial origins. Materials in the later included decorated sherds, concentrations of textiles fragments, and limited botanical remains. Among the textile fragments recovered was a specimen made in the tapestry technique in which cotton is intermingled with wool in order to generate a design visible on both sides of the textile. On this fragment, the design is that of a snake head, a common theme in Lima iconography (fig. 5.3).



Figure 5-3 Fragments of tapestry with serpent heads design, Unit 11, layer A

The underlying Layer B corresponded to the main refuse deposition. This layer was of similar sandy silt and color composition to Layer A, but contained significantly more cultural materials, but of the same type found in Layer A. These materials included another fragment of decorated tapestry of cotton and wool (figure 5.4), associated with a set of small wooden sticks, each wrapped in thread (figure 5.5) likely used in the weaving process. The last layer of this unit (Layer C) was in the natural, sterile soil of the orange gravel found in other sectors of the site.



Figure 5-4 Fragments of tapestry with serpent heads design, Unit 11, layer B



Figure 5-5 wooden sticks wrapped in thread, probably used for textile production

Summary - This unit exposed a short-term refuse deposit, and showed that activities at this locale only occurred late in the site's occupational sequence. In comparison with middens in Sectors 1 and 2, little food remains were found, merely a few shellfish and botanical fragments. Several ceramics from the refuse were decorated in the classic Late Lima style, and among the many textile fragments were two decorated tapestry specimens. Lima decorated textiles are well represented at public architecture sites and it has been proposed that, in addition to constituting an important wealth good, they served an important role in the solidification of Late Lima political organization through the communication of Lima ideologies (Kroeber 1954; Mogrovejo

1995; Flores 2005). For example, at Huaca Pucllana in the Rimac valley, important political changes manifested in architectural shifts were also associated with an increase in textile production (Flores 2005).

5.4 EXCAVATION OF UNIT 12

This 6 x 2 m trench was located in an interior room of the six room, lower smaller compound, and was oriented following the architecture with one of the 2 m sides adjacent to a wall visible on the surface (fig 5.6).

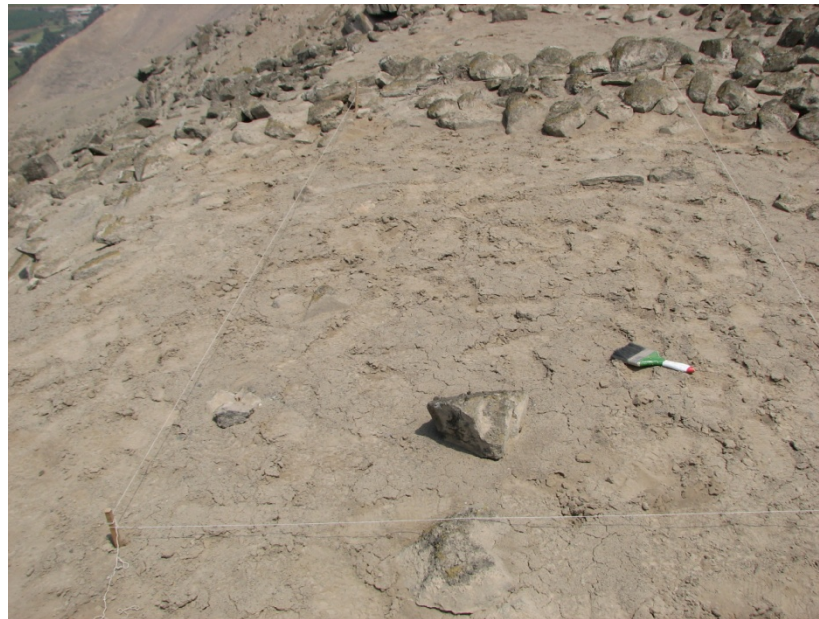


Figure 5-6 Sector 3, Unit 12 before excavation

Layer A consisted of a loose, beige, sandy silt mix of aeolian and erosional deposit, stones, and refuse similar to the upper layers elsewhere at the site. Layer B was similar in color, composition and texture, but contained more disturbed cultural materials. Lying well above the floor, Layer B represents a post-abandonment stratum. During excavation of Layer B, we uncovered two features: a wall bisecting the unit, and a floor or tamped surface on one side of

this wall, in the southern part of the unit. The two sides of the unit thus, accordingly exhibited different stratigraphies (fig. 5.7).

To the southwest of the wall, we excavated Layers D, G and H, while on the other side of the wall, were the Layers C, E, and F. As these layers were not completely consistent in thickness and depth, we were cautious about treating them as contemporaneous.

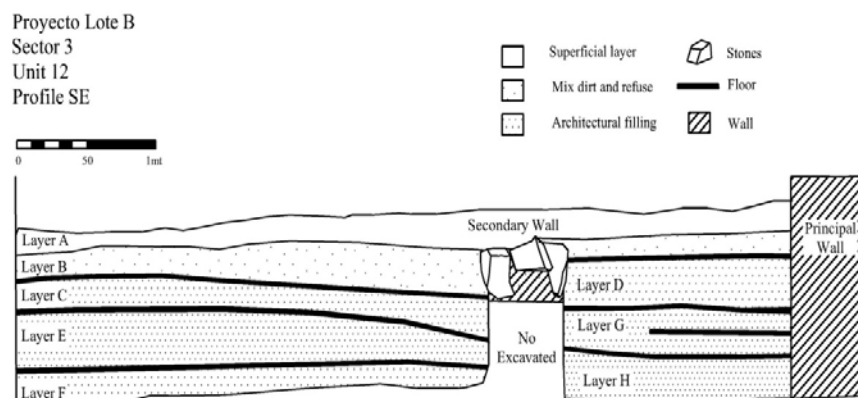


Figure 5-7 Sector 3, Unit 12, Profile SE

Layers C, E and F were composed primarily of three overlying floors. The first of these (Layer C) was a well finished and distinctive surface of particularly good preservation save for the vicinity of the SE profile (5.8). Later it became evident that here the floor was partially destroyed by the gradual sliding of the terrace down the hill side. In fact, all of the strata on the south east side of the unit were affected by this sliding.

This floor contained a post hole like feature near the room's inner or secondary wall, filled with medium size stones and with no traces of wood. The face of the inner wall featured a mud plaster covering over the stones. The wall was not similarly finished on the other side, suggesting, that this inner wall was built to face only the north east portion of the room. This floor in Layer C was temporally associated with the building of the inner wall.



Figure 5-8 Sector 3, Unit 12, NE view

Under the floor, the remainder of Layer C consisted of a compacted, sandy silt, fill with few artifact inclusions. This fill lay over another floor, Layer E, which was also compact, and tamped, but containing more stone inclusions than the Layer C floor (fig 5.9). The Layer E floor passed under the inner wall, showing that this secondary wall was built to partition the room at the time of the laying down of the Layer C floor.



Figure 5-9 Sector 3, Unit 12, Layer E, floor surface, NE view

Below the floor zone of Layer E was another deposit of artificial fill (similar to the one located in Layer C). In the fill we found an apparently in-situ, small wooden stick (2 centimeter

of diameter) placed vertically as a small post (fig 5.10). This was located almost in the NE baulk of the unit. This stick or post was assigned to a context identified in the next layer as Feature 05.



Figure 5-10 Sector 3, Unit 12, detail wooden stick – feature 05

Part of Layer E consisted of a small construction (Feature 05) over a tamped surface (floor?). The small structure was identified as feature 05, with the associated surface/floor corresponding to the top of Level F. The surface/floor was constructed over the natural soil, with some artificial fill placed in create a level surface (fig.5.11).



Figure 5-11 Sector 3, Unit 12, Layer F, Feature 05, NE view

5.4.1 Feature 05

Feature 05 was small, and semicircular in shaped, delineated by medium sized stones, alongside on of which was the vertical stick. Inside the semicircle formed were ashes and small fragments of charcoal. Initially, we were inclined to think that we were dealing with a hearth, but the lack of indications of the stone having been exposed to fire and the shallowness of the ash accumulation, suggested the contrary (fig 5.12). Layer F was the last stratum dug on this side of the unit.



Figure 5-12 Sector 3, Unit 12, feature 05 during excavation

On the other side of the wall, a similar superpositioning of three floors was recorded, corresponding to Layer D, G and H respectively. The first floor in this side (Layer D) lay directly under Layer B (fig. 5.13). This was merely a tamped down surface, rather than the smoothed, formal floor (Layer C) on the other side of the wall.



Figure 5-13 Sector 3, Unit 12 Layer D, SW view

The fill under the Layer D floor was very loose and easy to excavate. In it, we found very small concentrations of shellfish fragments, and some plants remains including a few peanuts shells. The inner wall showed no plastering or finishing on this side. Underlying this stratum was Layer G, marked by the presence of a big boulder, and consisting of a well finished and smoothed mud floor (fig. 5.14).



Figure 5-14 Sector 3, Unit 12, Layer G

The upper surface of the floor was the top of Layer G. The floor exhibited a stratigraphy of thin mud surfaces, indicating multiple reflooring episodes or a frequent renewal and patching of the original floor. Under the floor surfaces was a loose fill, with few cultural remains.

A third floor was defined and identified as Layer H. The excavation of Layer H took place in two levels. The second of these levels was a small test pit to explore the depth of the layer and distance to sterile soil. This was reached after 20 centimeters (fig 5.15) of fill composed of silt, stones, and occasional cultural materials.

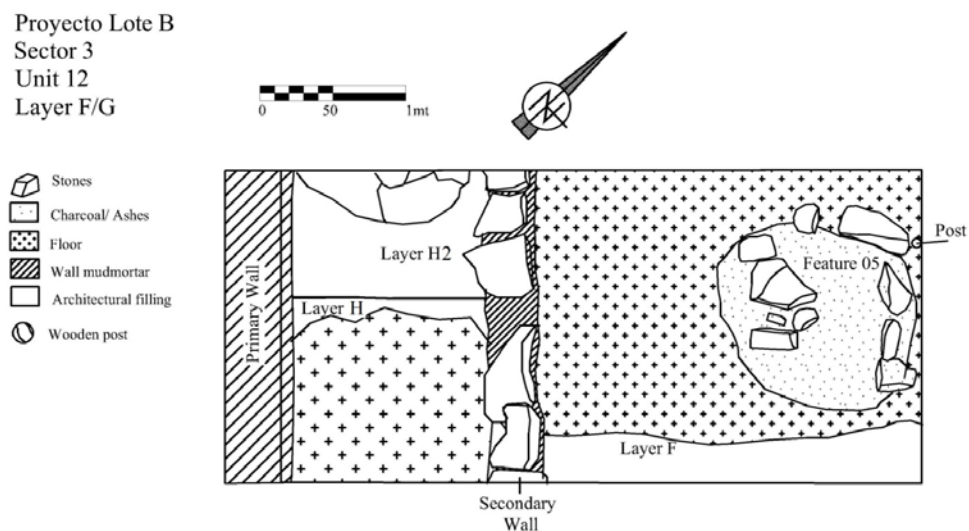


Figure 5-15 Sector 3, Unit 12, Layer H, level 2

Summary This unit revealed three episodes of building in the an internal room of the smaller compound, likely all within a relatively short. The earliest episode (probably dating to the construction of the room itself) was represented by the Layer F floor, and the small, associated feature (Feature 05) of unknown function. At a subsequent point, the floor was covered intentionally with fill and a new floor was laid down. This floor in turn was

subsequently covered with fill to support the Level C floor. The inner wall was built to subdivide the room at this final phase in the structure's use.

As with the assemblages of Unit 11, the floor and fill assemblages of Unit 12 did not display the density of artifacts found in corresponding contexts in the domestic Sectors 1 and 2. One of the most striking differences is the relative lack of food remains and other domestic debris in this unit.

5.5 EXCAVATION OF UNIT 13

Between the upper and lower terraces, and halfway between the smaller compound and the artificially cleared space, was a patch of darkly colored soil. As such dark areas at the site represent either a hearth or a refuse accumulation exposed through wind action, Unit 13 (2 x 2 m) was placed to explore this locale (fig 5.16).



Figure 5-16 Sector 3, Unit 13 during excavation

Although an attempt was made to excavate Unit 13 in natural levels, this proved to be more than difficult. This midden deposit was composed of several small dump events, with little time separation between them. These successive small depositions likely represent one phase of use (Late Phase). Ultimately, I distinguished five layers (A through E) containing similar materials. These materials consisted of abundant charcoal, moderately sized stones with evidence of been exposed to fire, botanical remains, especially charcoal and cane fragments, and decorated and undecorated sherds. Overall, the density of materials was very high (especially charcoal and ceramics), comprising more than 60% of the volume of the layers.

Excavation showed that the area originally inclined as the natural slope of the hill, before deposition of refuse, likely originating from the upper terrace. The orientation of the refuse following the slope, with more accumulation toward the bottom, supports this supposition.



Figure 5-17 Sector 3, Unit 13, Profiles

Summary -This unit consisted of a concentrated midden deposit between the upper and lower terraces, and likely pertains to refuse from activities on the upper terrace (fig. 5.18). The

nature of the midden matrix and uniformity in cultural materials suggests that the dumping that created it took place in a relatively short amount of time, and that these activities included emptying of hearth contents (charcoal, ash, burned stones and fragments of large pots).



Figure 5-18Sector 3, Upper terrace with units 13 and 16

5.6 EXCAVATION OF UNIT 16

We were not able to identify from the surface any areas that gave evidence of use for domestic activities or of domestic refuse disposal. All the architecture visible from the surface was non-domestic in plan and scale, including several plazas and patios, and adjoining small rooms with labyrinth access. To test the assemblages associated with the large compound, Unit 16 was excavated.

This unit was located toward the highest part of the upper terrace, in the middle of the compound in what appears to be the central plaza of the building (fig. 5.19).

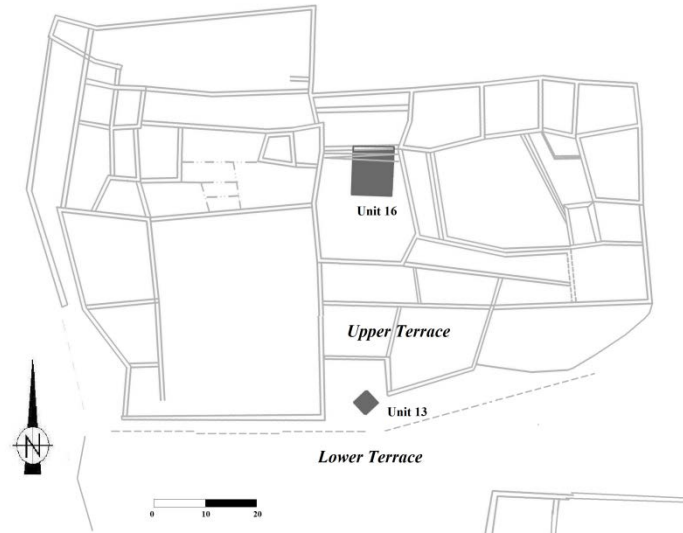


Figure 5-19 sector 3, Upper Terrace

Unit 16 was a shallow 5 x 10 m trench. The uppermost stratum was the same active layer of silt found elsewhere at the site, although with even less artifact inclusions. In excavating this layer, we found that the interior wall of the compound was covered by a mud plaster painted with a bright yellow, clay-based pigment. At the base of Layer A, a flight of steps were found, also painted yellow, perhaps part of a zigzag entry into the upper rooms (fig 5.20 and 5.21).

In some areas the construction material was visible below the paint, revealing largely the same kinds of local stone with mud mortar used in other architecture (including domestic) at the site. However, a notable difference in construction technique was the use of small, mud bricks; a typical Lima culture construction material that, other than this building, is surprisingly absent from Lote B. The use of these bricks is recognized as one of the most diagnostic features of Lima population architecture, and their relative absence from Lote B is striking given the preponderance of Lima-style pottery. The mud bricks are square, roughly 10 cm on a side, and probably mold made. In the Lima architectural sequence, the change from mud bricks made by

hand to ones made in molds and made more square, is recognized as a Lima-wide chronological shift (Bueno 1982,1974; Marcone 2000).

The nature of the architecture, and the possibility of a preserved frieze or mural, required me to cease excavation as my permit did not authorize me to become involved with monumental architecture in a state of good preservation.



Figure 5-20 Sector 3, Unit 16 during excavation



Figure 5-21 Sector 3, Unit 16 after excavation

5.7 CONCLUSIONS - SECTOR 3

Public buildings painted in yellow have been reported from other Lima culture centers, notably the Old Temple of Pachacamac (Shimada 1991; Franco 1993; Franco Jordan and Paredes Botani 2000), and at Maranga and the Huaca Pucllana in the Rimac valley (Flores 2005). For example, the main public building in Huaca Pucllana was painted yellow in its last phases of use. This building is held as archetypical of the political-religious architecture of the Lima culture, and the yellow color is argued to have been associated with elite political-religious activities (Flores 2005). In light of all the evidence, I am confident that we can assign a non-domestic function to the large compound, and to Sector 3 in general. Given this context, we can by extension interpret the food remains found in the Sector 3 refuse deposits as likely to represent non-domestic ritual/feasting activities taking place in and around the architecture. The finding of fine tapestry fragments with Lima iconography (and tools for their production) in this area hints that such valuable objects were made, stored, or exchanged here.

In site-wide terms, the comparatively shallow deposits indicate a shorter occupational span for Sector 3 than Sectors 1 and 2. In other words, occupation spread to the Sector 3 area in the last phase of the site's occupation, contemporaneous with the youngest occupations in Sectors 1 and 2. The bricks and Late Lima style help assign all but the lowest layers of Unit 12 to the Late Phase at the site. This late construction of the most labor-intensive, imposing, and specialized architecture at the site in Sector 3 indicates significant change in elite activities at roughly the beginning of the Late Phase. This change included new provision for architecturally defined public space (plazas), restricted access space (either storage or ritual), and greatly enhanced storage capacity. These changes also mark Sector 3 as likely to be the spatial nexus where - - through the elite residents of Sectors 1 and 2 - - the population around Lote B

connected with the overarching political and ideological structures of the Lima polity. Seen from a slightly different perspective, these architectural changes could also be interpreted as indicating the development of a new Lima sociopolitical configuration, or Late B's integration into a Rimac-centered political economy, at the start of the Late Phase.

The differences from other and earlier construction at the site, and the strong similarities to public architecture in the Rimac Valley, suggest not only a shift in the Late Phase of what the local elites at Lote B were doing, but also stronger ties (at least in public architectural stylistic preferences and thus public display) to the large centers of the Rimac Valley.

6.0 EXCAVATION OF SECTOR 4

6.1 INTRODUCTION

Sector 4, on the west slope of Cerro Manchay and overlooking the valley floor, is an area with non-domestic architecture visible on the surface. Sector 4 is relatively distant from the other sectors of Lote B. Three units (14, 15, and 17) were excavated in the sector. The stratigraphy and features of the excavations are described in this chapter. The results of the analysis of the artifact assemblages are presented in Chapter 7. Before this project, Sector 4 was the only part of the site identified as Lote B (fig 6.2) by the INC (Instituto Nacional de Cultura del Peru). Access to this part of the site is relatively easy from the modern community, also named Lote B. This modern community extends over the lower section of the slope, and was constructed over ancient domestic structures identified decades ago by Patterson, and discussed in Chapter 4.

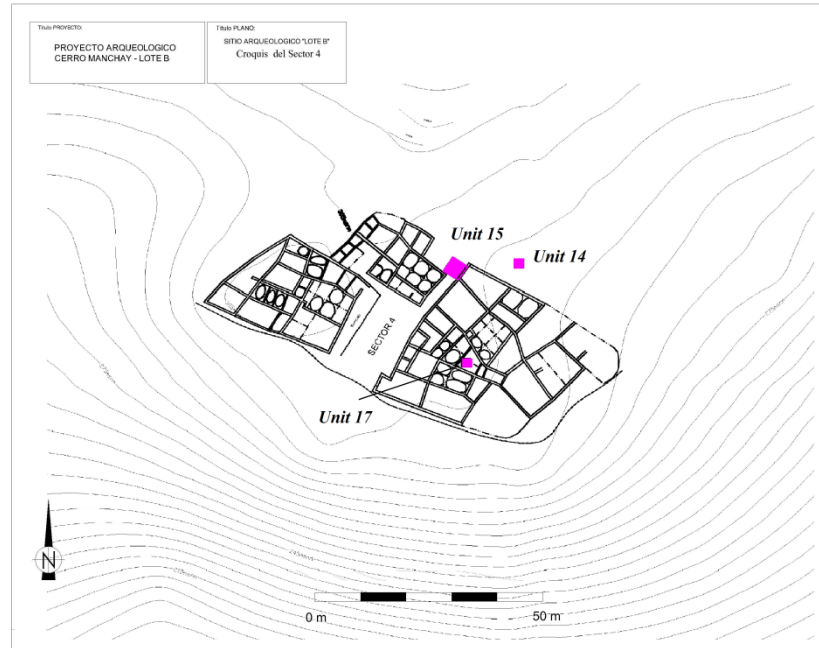


Figure 6-1 Sector 4 Map



Figure 6-2 Lote B from the valley floor

6.2 DESCRIPTION

The architectural remains visible on the surface reveal a semi-rectangular building, constructed over a natural platform-like part of the hill. The building walls are stone and mud-mortar, covered with a mud-plaster. The walls of the main rooms are about 50 cm wide, while secondary and internal walls are close to 10 cm wide. The building is composed of small rooms arranged in two clusters (fig. 6.3). Between these two clusters is an open space or plaza, readily accessed from a entry located in the east side of the building. These rooms are sub-divided into multiple, small storage facilities. Interior rooms range in size from 2 x 2 meters to a maximum of close to 10 x 10 m.



Figure 6-3 Sector 4 view from Sector 4

6.3 EXCAVATION OF UNIT 14

One of these dark colored patches was located close to a main entry to the building, and recent disturbance of it revealed a high density of artifacts and ecofacts (fig. 6.4).



Figure 6-4 Detail of refuse accumulation in Sector 4

The location of this refuse deposit suggests it represents material that would have been swept or thrown out the entry of the building (fig 6.5).



Figure 6-5 Sector 4, location Units 14 and 15

Unit 14 was excavated in seven layers (Layers A – G; fig 6.6). These layers represent at least two distinct occupations. The earlier occupation includes several child and infant burials. This was followed by the use of this part of the site for refuse deposition.

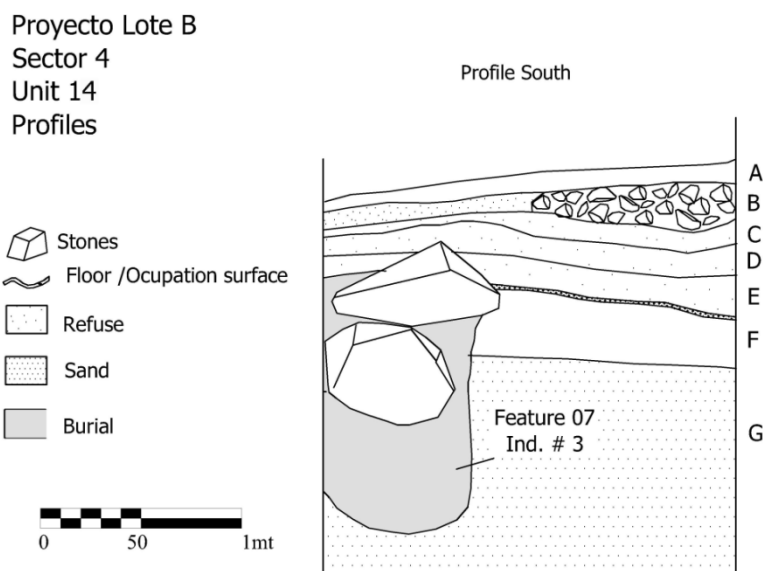


Figure 6-6 Sector 4, Unit 14, Profile South

Layer A consisted of the same active layer of aeolian sandy silt as elsewhere at the surface of the site. Layer B was sandy silt as well, but the proportion of refuse remains was lower than in the deflated deposit of Layer A. The distribution of materials in Layer B was irregular; there were spots or high artifact concentration, and others lacking artifacts at all. In general, the refuse recovered from this unit included small stones, charcoal, a small amount of ceramics, botanical remains, and a small amount of shellfish remains. The next three layers (C, D and E) were more compact sediments but displayed similar matrix characteristics, and with lower refuse density. Again, it was possible to identify small areas of denser refuse deposition (fig 6.7).



Figure 6-7 Sector 4, Unit 14, Layer C, beginning of a refuse accumulation

Below Layer D, in the south-east corner of the unit, a light yellow matrix appeared. Inside of this yellow area, the point of a rock was visible (fig. 6.8). Initially, we thought that this was another small and localized refuse deposit in the layer, but with additional excavation, this spot was identified as the shaft made for the burial of the individual #3 of Feature 07. The appearance of this burial shaft in this layer suggests that this individual was buried before the Layer D deposition (see discussion of Feature 07 below).



Figure 6-8 Sector 4, Unit 14, Layer D/E

Below Layer E was a tamped surface (Layer F) with charcoal and ash staining, that probably functioned as an outdoor occupational surface. Layer F was subdivided into three excavation contexts (fig. 6.9), with F1 consisting of the intrusive burial shaft, F2 a deposition (shallow and almost clean of archaeological materials like ceramics or plants) of charcoal and ashes on the surface, and F3 being the surface itself.

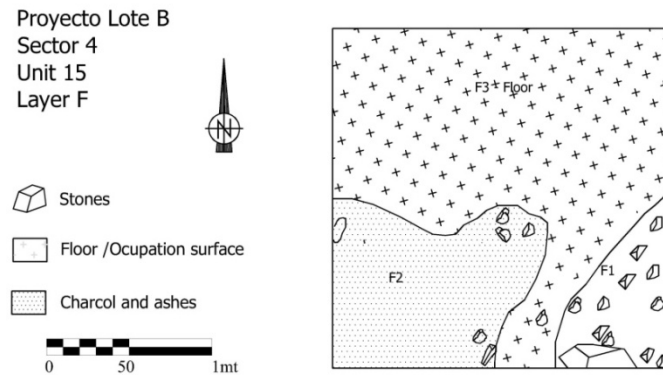


Figure 6-9 Sector 4, Unit 14, Layer F

The formation of the tamped surface marks, and the subsequent refuse accumulation over it, marks a radical change in the use of the area. It is clear that this surface was cut by the shaft of Feature 07.



Figure 6-10 Sector 4, Unit 14, Layer F detail

Below Layer F, the matrix changed dramatically to an aeolian-deposited sand, with few artifact inclusions. During excavation of this Layer G, several clusters of stones of different sizes were found. These stones were within a compact and hard soil matrix very different from the sand making up the rest of the layer (figure 6.11).



Figure 6-11 Sector 4, Layer G, Feature 07 during excavation

Initially, all these stones clusters were interpreted as part of a single feature (Feature 07). Following further excavation, it was determine that the stone accumulations belonged to the shafts of three different burials. One of these burials (pertaining to individual #3) had been made in the Layer E occupation. The other two tombs were clearly constructed before the construction of the Layer F floor. Later, a fourth tomb was found, more or less at the same level of the other three burials.

6.3.1 Feature 07

This feature was first seen as a concentration of large stones under the tampered floor (Layer F). A fourth tomb, mentioned above, was somewhat spatially separated, being located toward the center of the unit (fig. 6.12), but all four of these graves are designated Feature 07. The density of tombs - - four in a 2 by 2 m unit - - suggests that the area served as a cemetery, although the limited extent of the excavation makes this only a hypothesis. Each of the five individuals found in Feature 07 was an infant or child. In fact, all nine individuals found at the site were children.

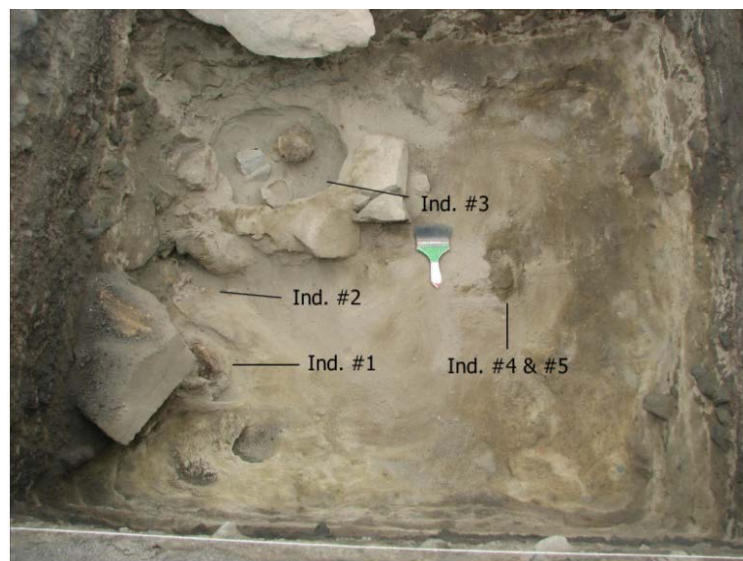


Figure 6-12 Sector 4, Unit 14, Layer G, feature 07, Individuals 1 to 5

6.3.1.1 Grave of Individual #1:

This grave was located near the east profile of the unit, and first appeared at the base of Layer F as a large boulder. No grave shaft or intrusive pit was seen in Layer F or above. As Layer F overlies the boulder, the burial would predate the deposition of the tamped Layer F (fig.6.13) surface. The skeletal remains were exposed during the excavation of Layer G. Both

the boulder and skeleton are slightly above Individual #2 in the fill, suggesting that this grave was constructed first (fig. 6.14).



Figure 6-13 Sector 4, Unit 14, Individual 1 in relation to the profile



Figure 6-14 Sector 4, Unit 14, features 7, Individual #1 and #2

Individual #1, a child of less than a year (9 months \pm 3 months), had been buried in a seated and flexed position. The body had been wrapped as a bundle in a textile tied with small ropes. Although bone preservation was good, the textiles had almost completely decayed. The bundle was surrounded by very hard, compact plaster-like soil (fig. 6.15).

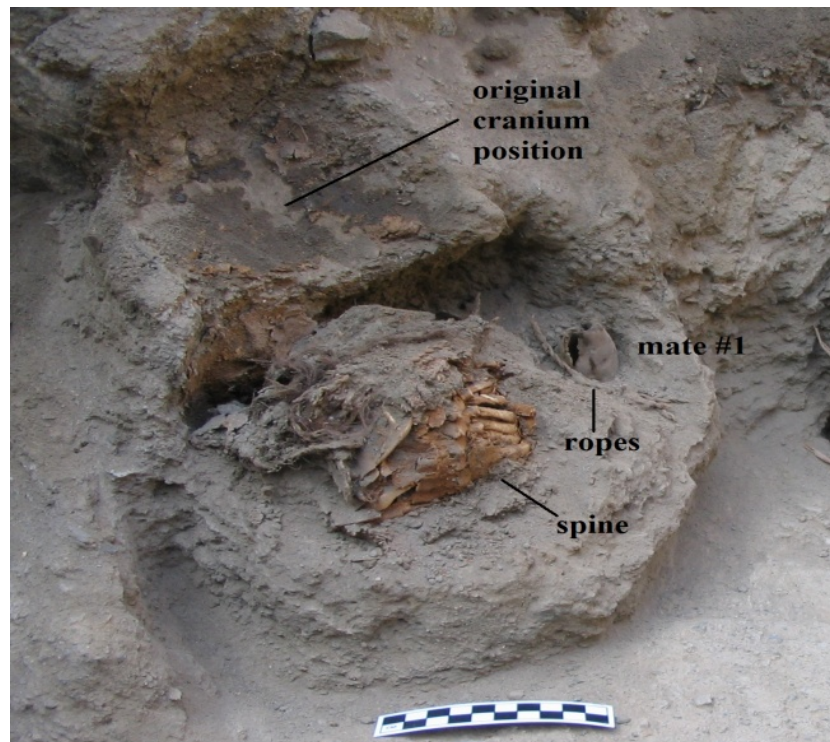


Figure 6-15 Sector 4, Feature 07, detail of Individual #1

Two *mates* survived as grave goods. A small, cone-shaped *mate* was placed to the right side of the body. A second *mate* was located in the individual's lap, in front of the pelvis. The position of the hands suggests the individual may have been buried holding this object (fig. 6.16).



Figure 6-16 Sector 4, Feature 07 individual #1 lower body detail

6.3.1.2 Grave of Individual #2:

The first indication of this grave was found during the excavation of Layer G. This grave was the oldest of the three, and was partially disturbed by the graves for Individuals #1 and #3. Like the other two graves, the tomb was a stone-capped pit, although in this case the capstones were not boulders (fig. 6.17).

Individual #3 was a child of roughly 3 years age (3 years \pm 1 year). Originally, the body was in an extended position, and wrapped with a cane mat. Between the cane map and the body it was possible to discern a thin layer of textile. A large cane was placed across the burial bundle internally, probably with the goal of making the bundle more stable. The bundle had been deposited by forcing the body into the shaft. The disturbance by the later burials of Individuals #1 and #3 may have led to the displacement of the cranial bones (fig 6.18, 6.20, 6.21, 6.22).



Figure 6-17 Sector 4, feature 07, Individual# 1 and #3

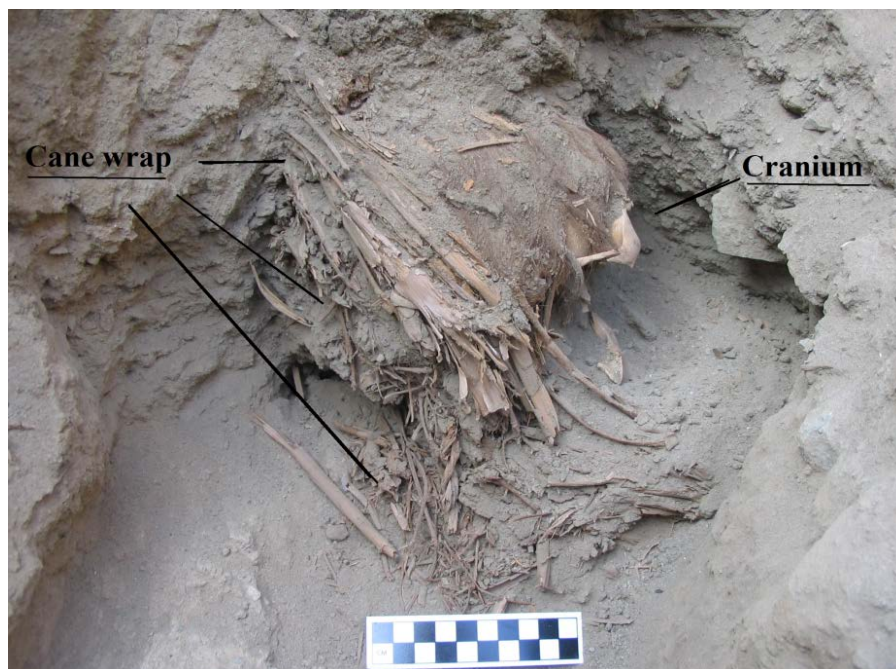


Figure 6-18 Sector 4, Feature 07, detail individual # 2

The only extent grave good was a *mate* (fig. 6.19), similar to others found in burials around the site. This *mate* was covered by a flat stone, which may have been the lid of the container. The *mate* was placed over the individual's feet after the body had been placed.



Figure 6-19 Sector 4, Feature 07, Individual # 2 Cranium



Figure 6-20 Sector 4, Feature 07, Individual # 2, Ribs exposed

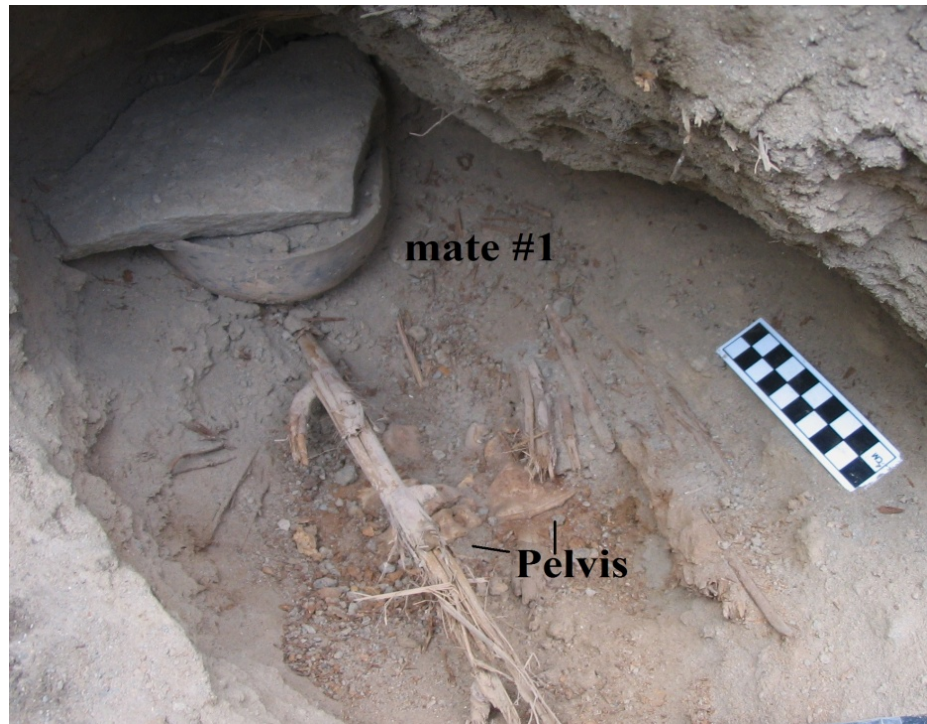


Figure 6-21 Sector 4, Feature 07, Individual # 2, Pelvis exposed



Figure 6-22 Sector 4, Feature 07, Individual 2, feet detail

6.3.1.3 Grave of Individual #3:

The first indications of this grave were seen at the top of Layer E. The burial was clearly intrusive into Layer F. The stratigraphic relations indicate that this is the youngest of the three graves (fig 6.23).



Figure 6-23 Sector 4, Feature 07, Individual # 3

The grave shaft was marked by several large stones or boulders. Just above the body, at around 30 centimeters below the base of the boulders, the shaft become clearly visible in the fill, and it was possible to recognize a burial chamber consisting of a semi-circular structure made of stones and hard, compact dirt. The individual had been placed inside this chamber, and the chamber sealed with a layer of the same compact material (fig 6.24)



Figure 6-24 Feature 07, Individual #3, Before excavation

The remains were of an individual of approximately two years old (2 years \pm 8 months). The individual was initially placed in a seated and flexed position, but the knees had slumped to the right (fig 6.26). The body was wrapped in a bundle of textiles with cords. The wrapping was poorly preserved in comparison to the bones and hair (fig 6.27). Extant grave goods included two *mates* (fig 6.25), placed at eye level in front of the skull. Each of these had small, stone lids.

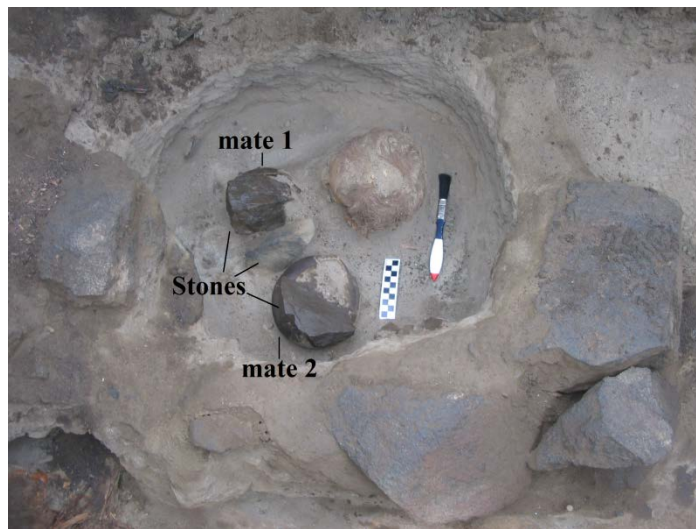


Figure 6-25 Sector 4, Feature 07, Individual # 3 during excavation



Figure 6-26 Sector 4. Feature 07, Individual # 3



Figure 6-27 Sector 4, Feature 07, Individual # 3 detail

6.3.1.4 Grave of Individuals #4 and #5:

This grave contained two individuals (fig 6.12), one placed directly over the other in the grave shaft. The bottom individual (#5) was buried in an extended position, while individual #4 was buried in a seated-flexed position. Individual #4 was about 6 months of age (± 3 months) at the time of death, with the cranium in a poor preservational state, in comparison to the other bones (fig. 6.30). Individual #5's age was around 9 months (± 3 months). Individual #4 may have been wrapped in textiles with cords, while Individual #5 was wrapped in canes and buried face down (figs 6.28 and 6.29).



Figure 6-28 Sector 4, Feature 07, Individuals #4 and #5

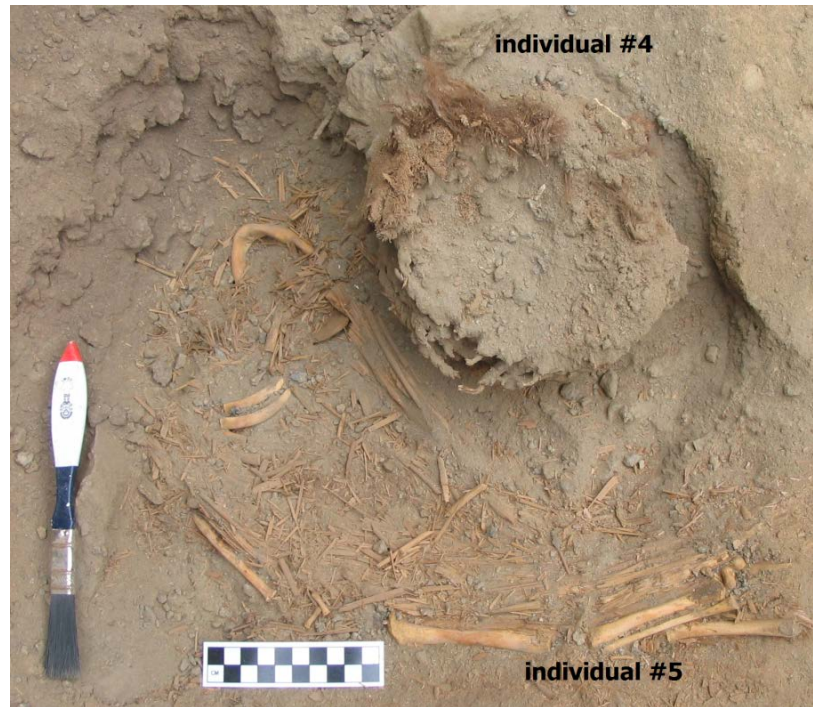


Figure 6-29 Sector 4, feature 07, Individuals #4 and #5, during excavation

The burials may have been simultaneous, and the disturbance to Individual #5 suggests some disturbance by the placement of the subsequent burial (fig. 6.31). Sestieri (1971) found a bundle burial intrusive into a extended cane-litter burial in Cajamarquilla (Sestieri 1971: 102, 103) and Stumer (1971) found another burial place facing down (Stumer 1953: 46). In excavating the cranial area of Individual #5, a complete bird was found, apparently in a grave good role (fig 6.32).



Figure 6-30 Sector 4, Feature 07, Individual # 4 lower body over individual #5

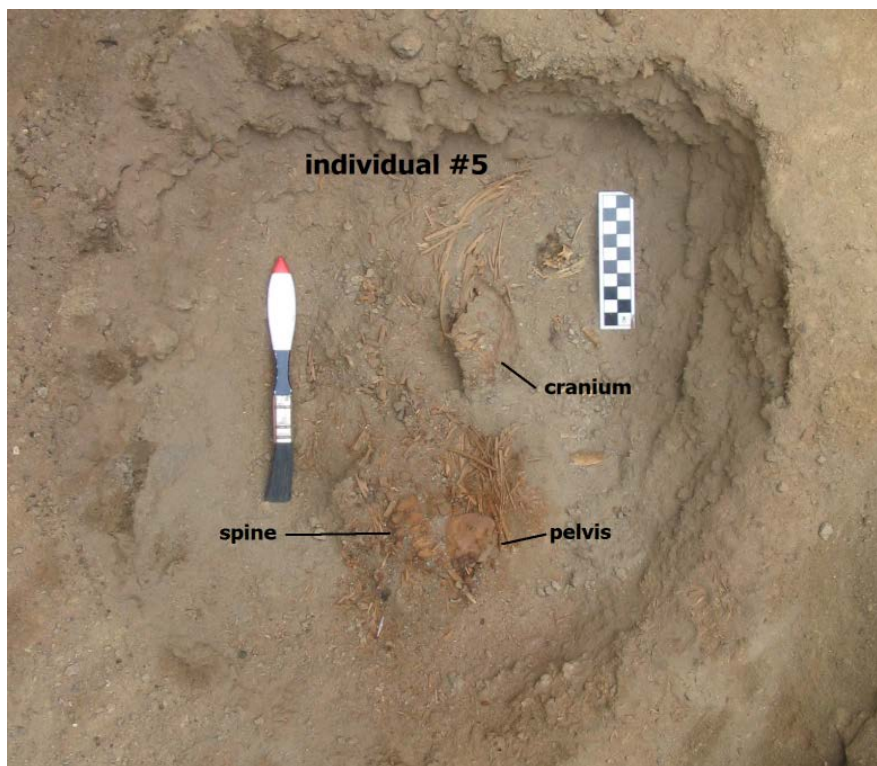


Figure 6-31 Sector 4, Feature 07, Individual #5 after the excavation of Individual #4



Figure 6-32 Sector 4, Feature 07, Individual #5, bird association

6.4 UNIT 15

Our preliminary impression was that upper occupation and deposits in Unit 14 were associated with the use of the building. However, to gain a better sense of relative chronology, I decided to place an excavation unit inside the doorway of the building, as doorway areas tends to better display the occupational sequence in public buildings than do other areas. Unit 15 A (3 by 4 m) was therefore placed in an entry, and laid out to parallel the wall.

Layer A was composed of collapse and aeolian accumulations. After the excavation of this first layer, a deposit of at least 12 superimposed floors was found (fig. 6.33). The upper floor remnants covered only a small part of the area identified as the entrance, while the lower ones covered a more extended area. Clearly, the building was intensively maintained.



Figure 6-33 Sector 4, Unit 15 after first level of excavation

The floor-bearing layer was designated Layer B, and each floor treated as a level inside Layer B (fig 6.34). The floors all show a relatively uniform composition, being made from fine, well-smoothed mud. In association with the floors were sherds identified as in the “Late Lima” style.

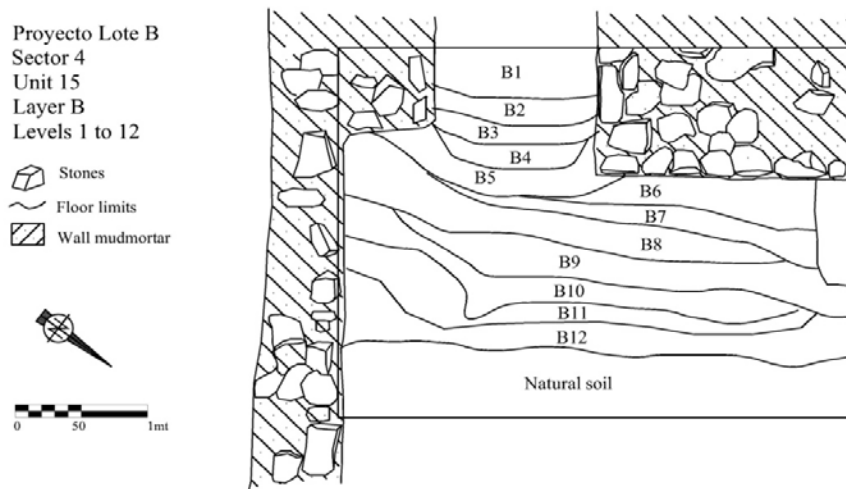


Figure 6-34 sector 4. Unit 15, Layer B

During the floor excavations, several soil lumps with yellow paint were found either in the fill between floors or directly over a floor. Initially, these lumps were interpreted as coming from the mud-plaster of the walls. But in the last three floors (B10, B11, B12), the yellow paint was found painted on sections of floor (fig 6.35). In general terms, the color and composition of the pigment of the floors is similar to the yellow paint of the building in Sector 3, and it is very possible that the Sector 4 building had a similar painted exterior.



Figure 6-35 Unit 15, Layer B, Level 11, Floor B11 detail

After clearing the superimposed floors, excavation ended at the last floor (B12). This floor B12 (fig. 6.36) was the original floor of the entrance, as shown by the floor's relationship with the wall, and the apparent lack of architecture underneath. Our permit did not allow further investigation of the building.



Figure 6-36 Sector 4, Unit 15, Floor B12

6.5 UNIT 17

This unit was randomly placed in an interior room of the building, and was intended to remove the superficial material of the floor and expose possible features, without damaging any of the architecture. Below Layer A, we found two, small (roughly 1 m square), contiguous rooms with walls of small stones in mortar covered by mud plaster (Fig 6.37). These rooms had well defined, but very clean floors, on which excavation ended. The size, similarity, and shape of the rooms were the basis for interpreting them as storage spaces.



Figure 6-37 Sector 4, Unit 17, Small deposit rooms

With the goal of further determining the function of the building, we also cleaned a looting pit along the west side of the building (fig 6.38).



Figure 6-38 Sector 4 with evidence of looting activities

Cleaning revealed two additional small, contiguous rooms with mud plaster walls and a well finished mud floor (fig 6.39). Taken together with the architecture visible on the surface, these excavations provide evidence that storage was a principal function of the Sector 4 building.



Figure 6-39 Sector 4, Rooms after cleaning looters' disturbance

6.6 SECTOR 4 CONCLUSIONS

The portion of Sector 4 investigated had originally been used for burials, and Unit 14 exposed four infant/child graves. Two distinct treatments co-mingled in these burials. The extended, cane-wrapped, with *mate* grave goods, pattern is a typical Lima pattern. Some of these burials may have been secondary burials. The flexed bundle burial with *mate* containers has long been viewed as a Wari or Middle Horizon, style introduction into the area (Jijon y Caamaño 1949; Stumer 1954; Kaulicke 2000; DeLeonardis and Lau 2004). Surprisingly in my excavations, these flexed burials were under a refuse deposition associated with Late Lima style ceramics. Therefore, we must consider the possibility that flexed burials date to earlier than originally proposed, and are not linked to Wari at all. Indeed, seated, textile wrapped bundle burials are known from the Lurín Valley at least from the end of the Formative Period (Stothert and Ravines 1977; Makowski 2002; Pechenkina and Delgado 2006). Therefore, the shift to flexed burials

could essentially represent the re-adoption of local (Lurín Valley) traditions, against regional (central coast) ones, or even the local survival of traditional burial practices even when the coastal extended tradition predominated (DeLeonardis and Lau 2004).

Unit 14 revealed two clear occupations. The lowermost was the tamped surface of Layer F which corresponded to an occupational surface, probably used at the time the burials were made (with the exception of the intrusive grave with Individual #3). The uppermost occupation consisted of refuse deposition associated with the use of the Sector 4 building, and shows the change in use of the area from cemetery to storage facilities.

The Sector 4 building was a well-built and maintained, semi-rectangular, and heavily sub-divided structure with one large associated midden, placing its construction and use in the Late Lima phase. There are indications that it was painted yellow, interior and out, similar to the Sector 3 public building. Interior excavations (Units 15 and 16) revealed small (1 x 1 m) storage chambers, and we judge the building to have been made up largely of such storage spaces, with very limited “open” areas within it, and no evidence of domestic occupation. The size and patterns of the storage chambers is consistent with storage of agricultural crops. The many redundant small storage chambers, by analogy with arguments made for the Wari and Inka polities, could represent storage quotas for segments of the population, such as households. The building was only in use for a short period of time. The building was subject to intensive traffic, as indicated by the 12 episodes of reflooring of the entrance. As will be discussed in Chapter 7, I believe the refuse deposits near the building entrance reflect a periodic cleaning of the structure, or processing of materials before placement in storage.

The construction of this specialized storage facility represents a new and different level of storage practices by the Late B elite. The residents in Sector 1 already maintained

appreciable storage capability within their domestic architecture of that sector, and this continued in use after the construction of the Sector 4 building. Overall, the Sector 4 building, and its yellow color (the characteristic color of public architecture in the Lima polity), indicates a marked shift in political economy in the Late Lima phase. While we cannot be sure that production in the valley intensified in the Late Lima, or that the building was entirely devoted to storage of agricultural products, the Sector 4 building likely marks the emergence of surplus mobilization and staple finance as elite activities in the Late Lima phase.

7.0 VARIABILITY AND CHANGE IN ARTIFACT ASSEMBLAGES AT LOTE B ARCHAEOLOGICAL SITE

In this chapter, I compare artifact assemblages within and among the four sectors of the site; Sectors 1 and 2 which ended with residential occupations and Sectors 3 and 4 where the assemblages were associated with non-domestic buildings.

7.1 RECONSTRUCTING THE LOTE B STRATIGRAPHIC SEQUENCE

The stratigraphy seen in excavation allowed me to cross-tie the excavation levels for each unit into the following chronological framework (Table 7.1).

	Sector 1					Sector 2					Sector 3				Sector 4		
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8	Unit 4	Unit 5	Unit 6	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 17	Unit 14	Unit 15	Unit 16
Late Phase	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A	Layer A
	Layer B	Layer B	Layer B	Layer B	Layer B	Layer B	Layer B		Layer B		Layer B	Layer B	Layer B		Layer B	Layer B	
		Layer C	Layer C	Layer C			Layer C					Layer C	Layer C				
				Layer D								Layer D	Layer D				
Middle Phase												Layer E	Layer E				
												Layer G					
		Layer D	Layer D				Layer B	Layer C	Layer B		Layer F				Layer C		
		Layer E	Layer E				Layer C		Layer C		Layer H				Layer D		
Early Phase							Layer D		Layer D						Layer E		
									Layer E						Layer F		
									Layer F	Layer F							
									Layer G								

Table 7-1 Chronological sequence of the layers excavated at Lote B

7.2 CERAMIC ASSEMBLAGES

Analysis of the ceramics took place along two lines: decoration and ceramic styles, and distribution of vessel forms. Before presenting the results of these analyses, I will discuss the nature of the pottery represented at the site.

7.2.1 Decoration and style

Despite the small size of the site, a high proportion of the sherds recovered at Lote B were decorated, indicative of the functions (elite residence and public ceremony) taking place at the site. The high proportion of decorated pottery clearly distinguishes Lote B from the presumed commoner sites at the base of the hill. The two major ceramic traditions represented at the site are the Lima style and the Local Lurín/ Highland style. The former (discussed in Chapter 2) is widely distributed on the Peruvian central coast, and traditionally used to define the boundaries of the Lima culture. The Local Lurín/ Highland tradition has been less studied, but was proposed as a style that developed in the Lurín valley, possibly originally in the upper valley (Patterson et. al. 1982).

7.2.1.1 Lima ceramics at Lote B

Lima style pottery at Lote B and elsewhere is rather uniform, and, with some exceptions discussed in Chapter 2, does not show much change in decoration through time. For the purposes of this analysis, I follow the current trend in study of the Lima style pottery, which is to sub-divide the stylistic sequence into Early, Middle, and Late Lima components. It is important to emphasize that these components do not correspond to the three phases of occupation (Early,

Middle, and Late Lima) I was in discussing the occupation at Lote B. As I discuss below, the distribution of the pottery phases was not entirely chronologically consistent.

7.2.1.2 Local Lurín/ Highlands ceramics

Strongly represented in the Lote B assemblage was ceramic tradition not related to the painted pottery of the Lima style. This other tradition consisted basically of a variety of pots and jar (domestic ware) with vertical grooved lines on the rims (fig. 7.1). This pottery has a different surface finish (rougher, with more simple painted designs), matrix (brownish paste), and temper (larger inclusions) than Lima style pottery. This pottery tradition has been identified a local Lurín Valley tradition, seen most strongly in the highlands or upper part of the valley. The presence of this style in the lower Lurín Valley has been used to assess the interaction between coastal and highland populations during the Early Intermediate Period (Earle 1972; Dunn 1979; Patterson, Mc Carthy et al. 1982; Feltham 1984).



Figure 7-1 Local Lurín ceramic style from Lote B

7.2.2 Stylistic distributions at the site

Table 7.2 shows the presence/absence of the two ceramic traditions, by excavation layer. Although the number of fragments that can be stylistically identified with certainty in each layer is too small for statistical comparison, the excavations still yielded a valuable stratigraphically based framework for assessing the stylistic distribution.

	Sector 1					Sector 2					Sector 3				Sector 4		
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8	Unit 4	Unit 5	Unit 6	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 17	Unit 14	Unit 15	Unit 16
Late Phase	Lt Lo Lt	Lt Lm Lt	Lt Lt Lm Lt Lo Lt Lm	Lt Lt Lm Lo Lt Lt Lm	Lt Lm Lt Lm	Lt Lt	Lt Lt	Lm Lm	Lt Lm Lt Lm Lo	Lt Lm Lo	Lt Lt	Lt N.I. N.I. Lt Lm N.I. Lt Lt N.I.	Lt N.I. Lt	N.I.	Lt Lt	Lt Lt	Lt
Middle Phase		Lt Lt	Lt Lm					Lm Lm Lm	Lm Lm	Lm		Lt Lt			Lt N.I. N.I. Lt Lo		
Early Phase			Lm					Lm Lo Lm Lo Lm Lo		Lm							

Lt= Late Lima Lm= Middle Lima Lo= Local style

Table 7-2 Distribution of Ceramic Phases by Sector and Layer

At first glance, the table shows a degree of apparent chronological inconsistency, with fragments identified as belonging to different stylistic phases co-occurring in the same layer. As noted, there are recognized problems with the sequencing of Lima style pottery, and some of what has been interpreted as temporal change may correspond in reality to regional or investment variability (Kaulicke 2000, Segura 2004). In the case of Layer A assemblages, this mixing is probably due to the depositional characteristic of an active surface layer. In other cases, for example the distribution of Middle Lima style pottery in Unit 7 of Sector 1, the mixing of Late and Middle style pottery probably resulted from using artificial fill in construction, in this case of a ditch. If we leave Layer A aside, it is possible to see - in general and relative terms- a rough

correspondence between the occupational phases of the site and the distribution of stylistic phases. The layers belonging to the late occupation of the site are mostly associated with Late Lima style ceramics and the Middle Lima style ceramics are prevalent in the layers below these that correspond to the middle phase of occupation of the site.

The Local Lurín tradition pottery is largely restricted to the residential sectors (1 and 2), and in Sector 2, is present from the earliest occupation. This distribution is entirely consistent with the domestic storage/cooking character of this pottery. In contrast, the Local Lurín pottery is almost non-existent in Sectors 3 and 4.

The tables below present the numbers (table 7.3) and proportions (table 7.4) of decorated vs undecorated sherds by excavation layer, the volume of each layer (table 7.5), and the sherd density (table 7.6).

Sector 1										
	Unit 1		Unit 2		Unit 3		Unit 7		Unit 8	
	Deco	Total	Deco	Total	Deco	Total	Deco	Total	Deco	Total
Layer A	19	335	77	1412	50	502	49	181	18	36
B	**51 (+130)	1046 (+1723)	83	865	123	1465	63/140*	627/775*	5	25
C			66	485	45	503	23	140		
D			28	420	4	31	28	139		
E			1	32	105	733				
F					3	227				
Total	200	3164	255	3,214	330	3461	303	914		

** niveles al interior de la capa

* layer have b / b1

Sector 2										
	Unit 4		Unit 5		Unit 6		Unit 9		Unit 10	
	Deco	Total	Deco	Total	Deco	Total	Deco	Total	Deco	Total
Layer A	29	320	45	1022	6	56	103	1478	44	528
B	6	276	48	1505	151/29*	1536/145*	97	1021	36	148
C			58	782	48	462	44	410	**32 (+30)	404 (+147)
D					110	384			**32 (+16)	100(+166)
E					12	183			**66 (+10)	103(+120)
F					40	163			25 (+58)	42(+107)
G					109	1003				
Total	35	596	151	3,303	505	4,544	244	2,303	343	1885

* layer have b / b1

** levels inside the layer-chart

Sector 3								
	Unit 11		Unit 12		Unit 13		Unit 17	
	Deco	Total	Deco	Total	Deco	Total	Deco	Total
Layer A	5	107	4	103	4	38	NM	NM
B	44	620	6	75	25	538		
C			1	23	29	336		
D			0	20	10	165		
E			4	18	5	189		
F			0	10				
G			0	21				
H			8	15				
Total	49	1227	23	285	73	1386		

Sector 4						
	Unit 14		Unit 15		Unit 16	
	Deco	Total	Deco	Total	Deco	Total
Layer A	1	127	15	29	NM	NM
B	51	574	21	42		
C	33	515				
D	0	25				
E	2	20				
F	17	40				
G	4	10				
Total	108	1311	36	71		

Table 7-3 Count of Total and Decorated ceramics by Layer and Unit

	Sector 1					Sector 2					Sector 3				Sector 4		
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8	Unit 4	Unit 5	Unit 6	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 17	Unit 14	Unit 15	Unit 16
Late Phase	0.05	0.05	0.1	0.25	0.5	0.09	0.04	0.11	0.07	0.08	0.05	0.03	0.04	0	0.01	0.52	0
	0.07	0.09	0.08	0.14	0.2	0.02	0.03		0.1		0.07	0.08	0.04		0.09	0.5	
		0.14	0.09	0.16			0.08					0.04	0.09				
				0.2								0	0.06				
Middle Phase												0.22	0.03				
												0					
Early Phase		0.07	0.13					0.1	0.11	0.24		0			0.06		
		0.03	0.14					0.1		0.11		0.53			0		
								0.11		0.18					0.1		
										0.34					0.43		
Early Phase			0.1					0.06		0.6							
								0.23									
								0.11									

Table 7-4 Proportion of decorate /total fragments by layer

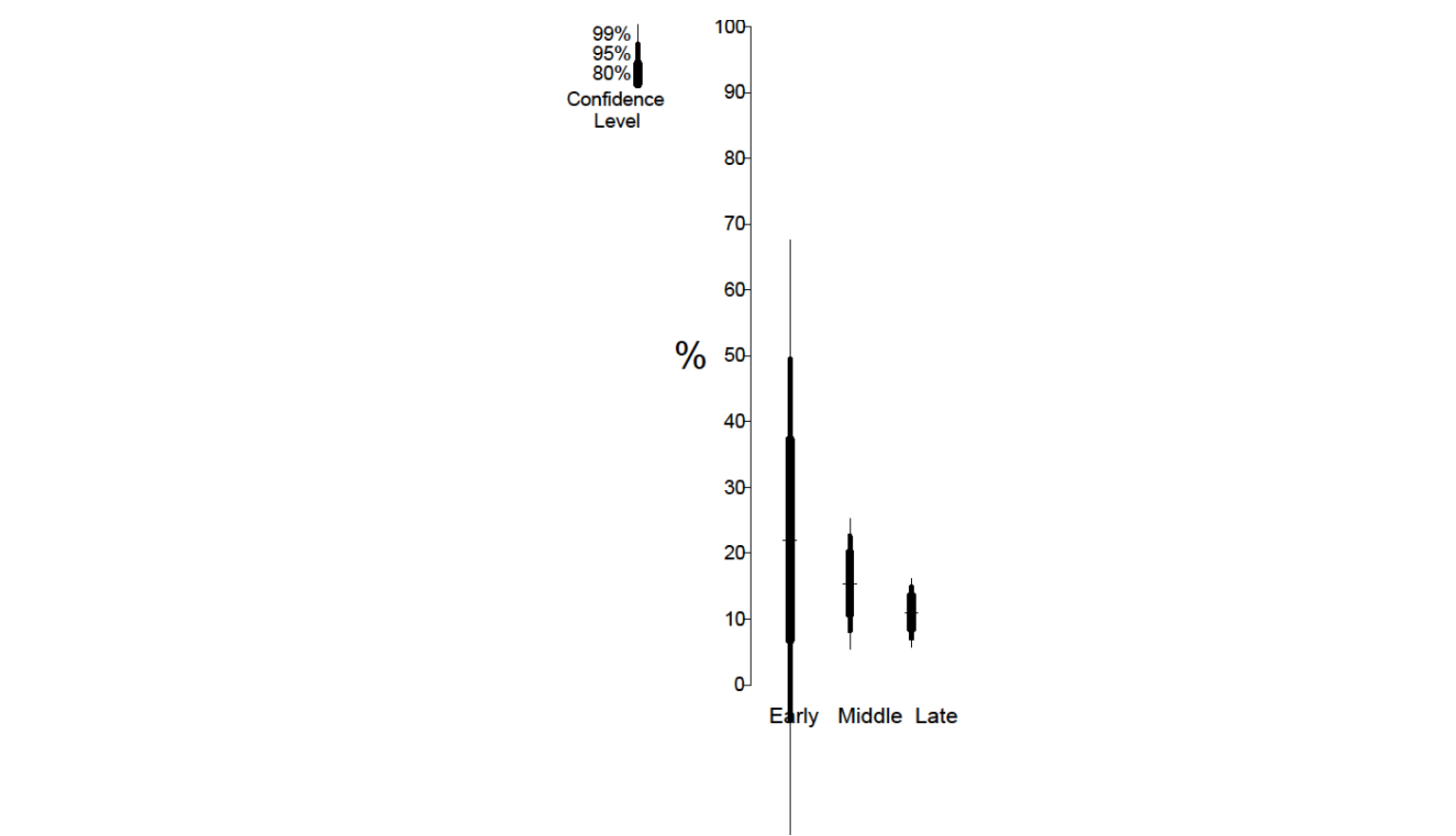


Figure 7-2 Bullet graph showing proportion of decorated pottery by phase

Table 7.4 and Figure 7.2 show that there was not a marked change in the overall proportion of decorated pottery at the site overall from the Middle to Late Lima phases. However, there are some apparent changes if we look at the each sector in turn (fig. 7.3).

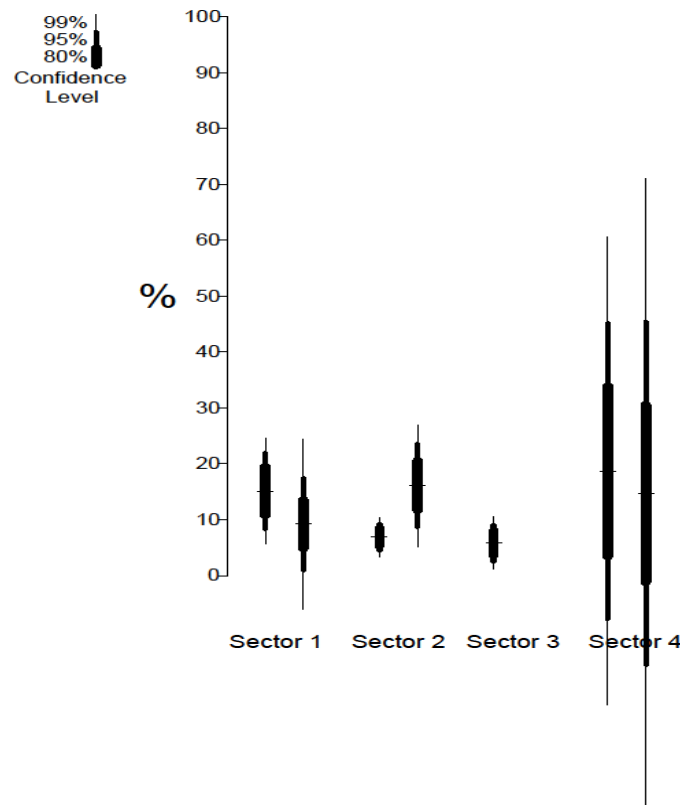


Figure 7-3 Proportion of decorated pottery at Lote B By Sector during Middle and Late Phases

While in Sector 1, there is a decline between from the Middle to the Late phases, Sector 2 shows the opposite, with markedly higher proportions in the Middle Phase. However, this difference in Sector 2 is due to the high proportions of pottery in a single unit (Unit 10). With this unit removed from analysis, there is not a significant difference between Sectors 1 and 2. Therefore, to the extent to which such pottery might serve as a correlate for wealth, then, there is no evidence for marked changes in household wealth on the part of Lote B residents. To the extent to which such decorated pottery was used for particular activities, such as serving, then,

there is no evidence of changes in the frequency of these activities, either. The high proportions of decorated pottery in what are clearly domestic refuse assemblages strongly suggests that this pottery was used in fairly everyday storage and eating activities by Lote B residents.

In comparing distribution of decorated pottery among the four sectors, it makes most sense to compare the Late Phase occupations, as the time when most of the architecture in Sectors 3 and 4 appears to have been constructed. Figure 7.3 shows no significant differences between the residential sectors (Sectors 1 and 2) and the sectors of specialized non-domestic architecture (Sectors 3 and 4). One interpretation of this distribution is that some of the same activities involving decorated pottery taking place in the domestic complexes of Sectors 1 and 2, (such as serving), were also taking place - - with similar kinds of pottery - - in Sectors 3 and 4, which lacked domestic refuse deposits. As I argue below, one of these common activities may have been communal consumption events or feasting.

Unit 15 of Sector 4 (the doorway of the storage/public structure) consisted of only two levels of excavation, but these the assemblages from these display among the highest proportions (50%) of decorated ceramics at the site. This distinction suggests a particular set of activities contributed to the Unit 15 assemblages, perhaps serving activities alone.

7.2.3 Functional differences among sectors: ceramics and depositional processes

The identification of Sectors 1 and 2 as residential, and Sectors 3 and 4 as non-residential, is based on more than just the architecture found in the sectors. One way in which I attempted to distinguish between different forms of deposition (midden vs non-midden, domestic vs non-domestic) was to compare ceramic densities (Tables 7.5 and 7.6). The two sets of sectors

differed significantly in the nature of the refuse deposits found in each sector. Later in this chapter I will present, also the botanical differences in detail.

Sector 1						Sector 2					
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8		Unit 4	Unit 5	Unit 6	Unit 9	Unit 10
Layer A	1.32	0.2	0.8	2.4	0.8	Layer A	0.32	0.8	1.2	2.24	5.5
B	1.05*	1.2	0.8	4.8 / 3.6*	1.72	B	0.2	3.2	2.4/1.6*	0.45	5
C		0.9	1.2	9.4		C		1.2	2.5	1.51	7
D		2.2	0.8	2.4		D			1.2		7.5
E		0.4	2.6			E			1.4		4
F			2.8			F			2.1		2.75
Total	2.37	4.9	9	22.6	2.52	G			2.4		
						* B/B2 both sides of a wall					
Sector 3						Total	0.52	5.2	14.8	4.2	31.75
	Unit 11	Unit 12	Unit 13	Unit 17		Sector 4			* two levels of layer B		
	Unit 11	Unit 12	Unit 13	Unit 17		Unit 14	Unit 15	Unit 16			
Layer A	1.2	2.75	1.2			Layer A	0.4	0.24	0.04		
B	1.6	1.92	0.8			B	1	1.3			
C		1.28	1.4			C	0.8				
D		1.19	0.8			D	1.6				
E		2.43	0.8			E	1.2				
F		1.28				F	0.8				
G		1.19				G	4				
H		1.19					9.8	1.54	0.04		
Total	2.8	13.23	5								

Table 7-5 Volume of matrix excavated in cubic meters by layers

	Sector 1					Sector 2					Sector 3				Sector 4		
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8	Unit 4	Unit 5	Unit 6	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 17	Unit 14	Unit 15	Unit 16
Late Phase	299.2	7060	627.5	75.4	45	1000	1277.5	46.7	659.8	96	89.2	37.5	81.6		317.5	120.8	
	99.6	455.3	1831.3	345.8	14.5	1380	470.3		2268.9		387.5	39.1	736.3		574	32.3	
		538.9	419.2	14.9			651.7					17.9	240				
				57.9								16.8	206.3				
												7.4	236.3				
Middle Phase												7.8					
		190.9	26.5				730.6	271.5	29.6			17.6			643.8		
		80	281.9				184.8		78.7			12.6			15.6		
							820		35.5						16.7		
Early Phase									55.8						52.5		
			81.1				130.7		80.9								
							80.5										
							420										

Table 7-6 Ceramics densities: Sherds by cubic meter

The density of sherds in Sectors 3 and 4 is significantly lower than Sectors 1 and 2, supporting the non-domestic function of those areas (fig 7.4). The activities represented by the discard in Sectors 3 and 4 involved less production of material remains, as would be consistent with locales used for storage, ceremony, and occasional feasting activities.

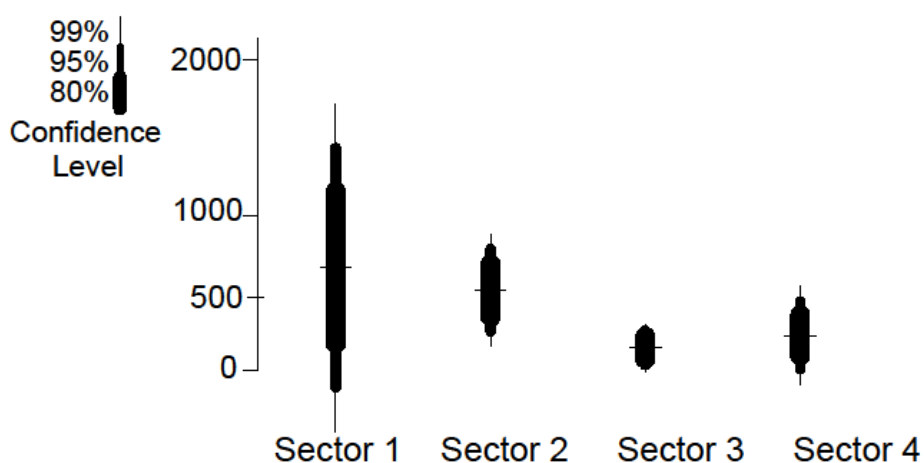


Figure 7-4 Bullet graph Sherd(count/volume) density by Sector

As shown in Figure 7.5, it is possible to divide the excavation lots into three categories in terms of sherd density. One group includes excavation layers in which sherd density is less than 100 per cubic meter. In most cases, these layers were recognized during excavation as constituting floor or occupational surface assemblages. The second group is excavation layers with densities of 200 – 500 per cubic meter. Most of the layers in this second group were defined during excavations as areas where cultural debris accumulated through non-midden deposition. The third group consists of excavation layers with a density of 500+ per cubic meter. Of the 15 layers in this midden group, all but three are found in Sectors 1 and 2. The preponderance of higher density units in Sectors 1 and 2 supports the hypothesis of functional differences between

the sectors. Further, as will be discussed later, while the layers of this high density group each correspond to refuse dumps, the high density layers in Sector 3 (Unit 13 Layer B) and Sector 4 (Unit 14 Layers B and C) did not have the attributes of domestic midden.

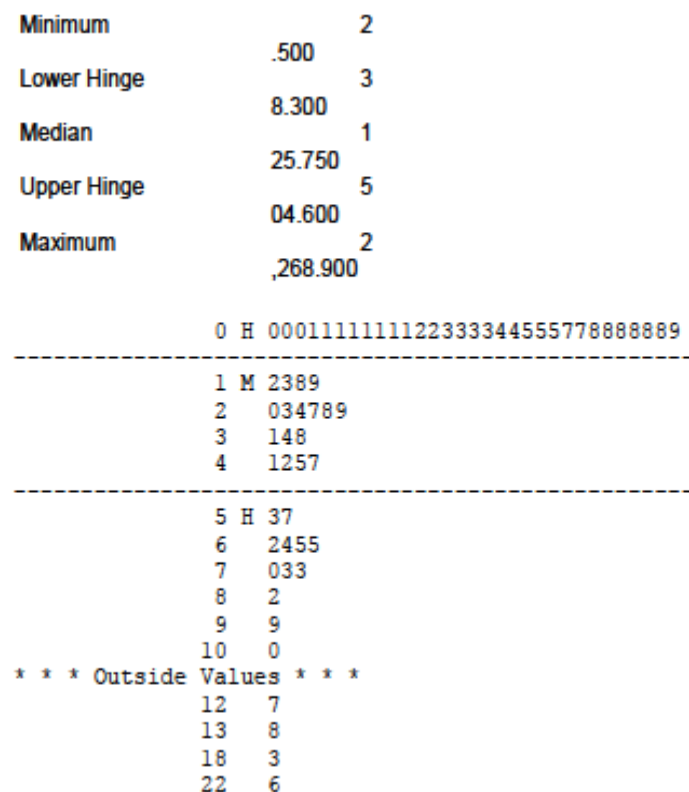


Figure 7-5 Steam and Leaf plot of sherd density per cubic meter

Sector 1 included storage spaces, intensive midden deposits (Units 2 and 3), and a contemporaneous, large, exterior hearth (Feature 01 of Unit 1) located in an open area between the residential complexes of Sectors 1 and 2, that may have been used in suprahousehold cooking (feasting) activities. The marked increase in ceramic density from the Middle through Late periods (Table 7.6) reflects the use of the area as a midden. As I will discuss later, comparison of Sector 1, Units 1-3 with the midden deposits of Unit 13 of Sector 3 (that likely corresponds to

materials discarded from the plazas of the monumental Yellow Building, suggests different forms and intensities of suprahousehold level consumption (feasting) taking place in these two locales (fig 7.6). Commensal activities in the domestic Sector 1 were of higher intensity, producing higher sherd densities then seen in the midden deposits associated with the public architecture Sector 3, which also contained lower proportions of decorated pottery (fig 7.7). Overall, the assemblages of the domestic Sectors 1 and 2 had higher proportions of decorated pottery than those of Sectors 3 and 4. The exception to this pattern is Unit 15 of Sector 4, a unit placed just inside of the main entrances to the building. Approximately one-half of the 71 sherds from the two levels of excavation in this unit were decorated.

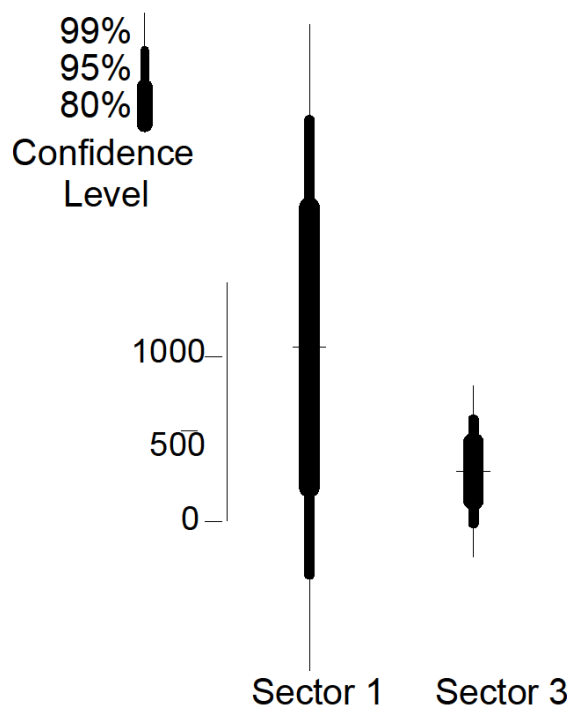


Figure 7-6 Bullet graph showing sherd densities in middens of sector 1 and sector 3

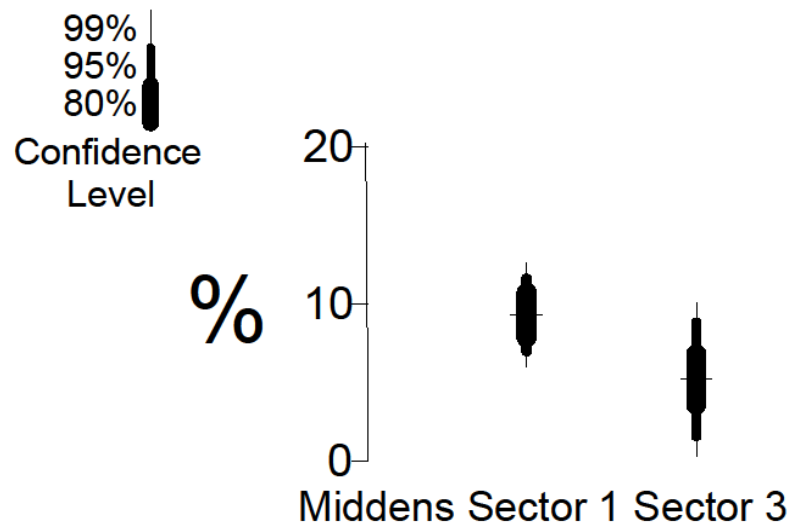


Figure 7-7 Bullet graph showing decorated sherd densities in middens of sector 1 and sector 3

7.2.4 Functional differences among sectors: vessel form distribution

Vessel form was another dimension of ceramic assemblage variability explored among contexts, although we recovered in total only 1863 sherds diagnostic to form. Vessel form was determined by classifying with the following attributes: rim and base form, vessel mouth size, vessel size and depth, and wall thickness. To avoid over-categorization, diagnostics were classified into six simple categories (table 7.7): (1) Plates: Open (mouth more than 1x the diameter of the base), and very shallow vessels, with flaring walls. Because of their shallowness, plates are designed to serve solid foods, rather than liquids or stews. (2) *Cuencos*/bowls: Open and relatively shallow vessels, with direct or slightly curving walls. Diameters of the mouth, vessel body, and base tended to be similar in the Lote B sample. Bowls are designed to serve liquids in addition to solid foods. (3) *Ollas*, *cantaros*, and jars: Deeper vessels, including *ollas* (where the height of the vessel is similar to its maximum diameter) and *cantaros* (where the

vessel is at least 1.5 x times higher than its maximum diameter). In this same category are pots, with and without necks. Typically, pots display rounded, incurving walls. These vessels ranged from open to constricted mouth, with the constriction making the vessel useful for holding and moving liquids, but making it more difficult to put in and remove large solid items. Cooking was a primary function of this category, as indicated by the exterior burning and sooting of the vessels, as well as their general shape. Larger vessels in this category could serve for both wet and dry storage. (4) Bottles/ *cantimploras*, and (5) Goblets/beakers: These are drinking vessels well known from Lima monumental architecture centers, and were some of the more commonly studied vessels in the classic studies of Lima culture pottery (ex: Kroeber 1925; Gayton 1926; Kroeber 1926; Strong and Corbett 1943; Willey 1943; Kroeber 1954).

Sector 1											
Unit 1		unit 2					unit 3				
	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O
Late phase	1 1 5 20 1 60 1 1 2	27 9 73 2 4 22 10 38 1 1 14 3 14	13 3 16 41 6 27 1 21 1 21 9	2	10 3 15 2 41 11 28 2 4 16 3 1 2 5	8 2 14 1					
Middle phase		6 14 1 1	26 6 30 4 3 29 13 53 3 3								
Early phase			3 4 1								

Sector 2											
Unit 4		unit 5					unit 6				
	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O
Late phase	1 1 2 9 2 7	7 2 27 2 1 9 1 12 4 30 1 1 1	6 3 16 1 3 1 15 14 2 8	3	22 46 14 2 23 2	6 2 30					
Middle phase			3 5 44 2 10 3 1 15 14 2 8 1		16 2 11	8 1 11 18 6 14 22 1 19 28 12 30 1	1				
Early phase			2 4 3 1 5 1 7 2 21 1 7			23 11 22 3					

Sector 3											
Unit 11		unit 12					unit 13				
	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O
Late phase	1 4 12 4 14	3 3 1 1 2 4 1 1 3	2 3 6 10 25 1 5 5 18 2 1 4 1 2								
Middle phase		3 2 3									

Sector 4											
Unit 14		unit 15									
	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O	P C/b O B G NI/O
Late phase	10 3 12 2 16 4 23 1 2 2 2 2 3 14 1 1 1	9 8 18 1 4 4 6 1 1									
Middle phase											

P plates
C/b Cuencos/Bowls
O Ollas/Cantaros/jug
B Bottle
G Goblet/beaker
NI/o No identified / other

Table 7-7 Vessel forms (sherds counts) by layer and Sector

	Sector 1																													
	Unit 1							unit 2					unit 3					unit 7					unit 8							
	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O
Late phase	12.5	13	62.5			13	23.5	7.8	63.5	1.7	3.5		38	8.8	47.1			5.9	33	10	50		7		33	8.3	58.3			
	23.5	1.2	70.6	1.2	1.2	2.4	30.6	13.9	52.8	1.4	1.4		55	8	36		1.4		48	12.8	32.6	2.3	5		100					
							45.2	9.7	45.2				40	1.9	40.4		17		80	15			5							
Middle phase							30		70				38	8.7	43.5		5.8	4.3												
							50		50				29	13	52		3	3												
Early phase													38		50	13														

Sector 2																															
		Unit 4						unit 5						unit 6						unit 9						unit 10					
		P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O
Late phase		20	20	40			20	19.4	5.6	75				21	10	55.2	3.4		10.3	31		65.7			2.9	16	5.3	78.9			
		50	11	38.9				15.4	7.7	69.2		7.7								34	4.9	56.1		5							
								24.5	8.2	61.2	2.1	2.1	2.1																		
Middle phase														4.7	7.8	68.8	3.1		15.6	55	6.9	37.9				40	5	55			
														11	5.6	83.3										47	16	36.8			
														56	8	32			4							51	2.3	44.2			2.3
Early phase																										39	17	42.3	1		
														33	66.7											39	19	37.3			7.7
														30	10	50	30														
														18	5.3	55.2		2.6	18.4												

Sector 3																			
		Unit 11						unit 12						unit 13					
		P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O
Late phase		20		80				50		50				40		60			
		40	13	46.4				25		75				14	24	59.5	2.4		
										100				18	18	64.3			
Middle phase								33.3		66.7				20	10	40	10	20	
								50		50									
										100									
								100											
								37.5	25	37.5									

Sector 4													
		unit 14						unit 15					
		P	C/b	O	B	G	NI/O	P	C/b	O	B	G	NI/O
Late phase				50	50			25	22.2	50	2.8		
		37	11	44.4			7.4	25	25	37.5		6.3	6.3
Middle phase		36.4	9.1	52.3			2.3						
				100									
		50		50									
		17.6		82.4									
				0.3	0.34								

P plates
 C/b Cuencos/Bowls
 O Ollas/Cantaros/jug
 B Bottle
 G Glober/beaker
 NI/o No identified / other

Table 7-8 Proportion of vessel by layer

The distribution by vessel forms is shown in Tables 7.7 and 7.8. The proportions of forms does not show significant change through time, as can be seen in comparing Middle and Late phases in Sectors 1 and 2 (fig. 7.8). And in many ways, the overall proportions of vessel forms between all sectors are similar, indicating significant food preparation/serving as well as

storage in the public architecture of Sectors 3 and 4, and likely reflecting significant storage activities in the elite complexes of Sectors 1 and 2.

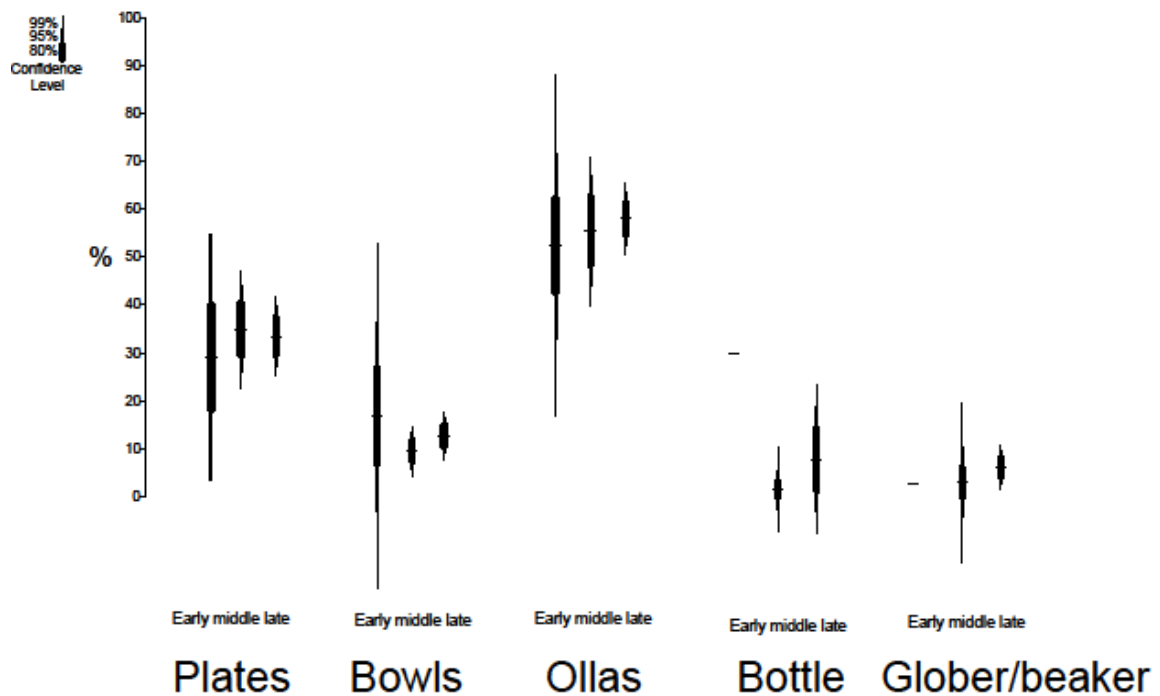


Figure 7-8 Proportions of vessel forms by pahse

There are, however, significant inter-sector differences, that again, point to functional differences between the residential sectors (Sectors 1 and 2) and the public architecture sectors (Sectors 3 and 4). Worth noting is the low representation of the specialized drinking vessels - - the bottles and goblets - - in Sectors 3 and 4. These vessels, that tend to be highly decorated and frequently found in association with the public architecture at Lima monumental centers, occur in roughly double the proportion in the residential sectors of Lote B. Another difference that can be seen in Figure 7.9, is in the plate and bowls categories. Although the proportions of main serving vessels (plates and bowls) is roughly the same for the four sectors, the relative

proportions of the two categories differ, so that Sectors 1 and 2 have serving assemblages with small proportions of bowls, compared to the proportions of bowls in Sectors 3 and 4 (fig 7.9). This difference is consistent with the observation made earlier that the ceramic assemblages could be manifesting slightly different types of serving/consumption activity in each area.

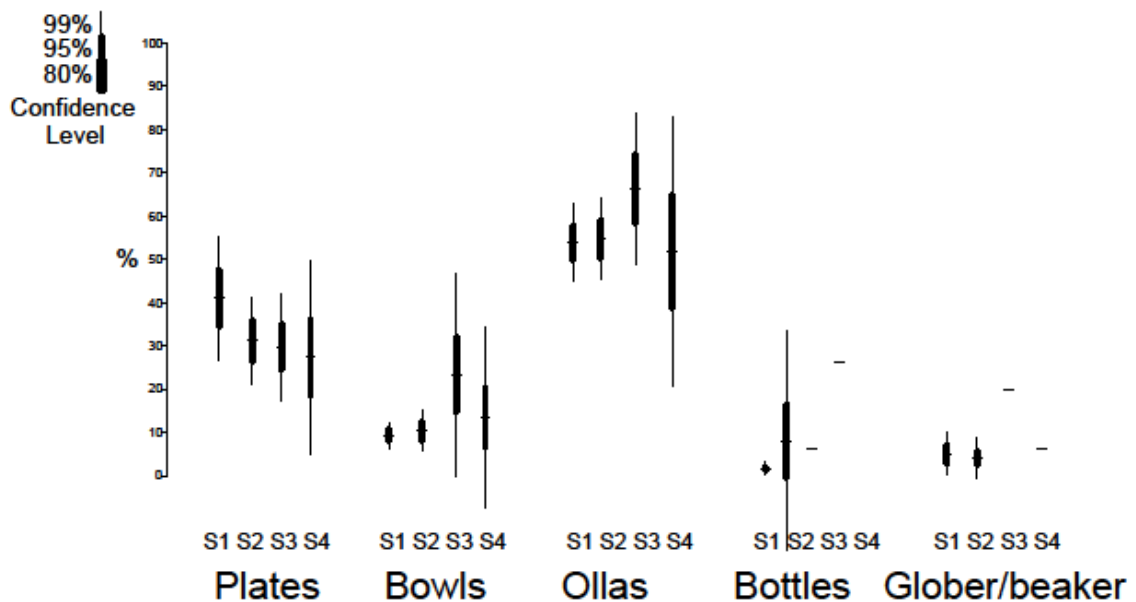


Figure 7-9 Proportion of Vessel forms by sector

Such differences in serving vessels may represent the difference between private consumption and public feasting, or between different types of feasting. In one classificatory scheme, inclusionary feasting is contrasted with diacritical feasting. To oversimplify greatly, inclusionary feasts are designed to create social bonds such as in establishing patron-client relations, work parties, or to facilitate the collection of tribute (LeCount 2001). In contrast, diacritical feasts are often drinking oriented parties, in which social distinctions are emphasized, and elite identities manipulated. The differences in serving activities might thus reflect two distinct serving prestige building strategies, one practiced in the private elite residential context,

and the other in the larger public architectural contexts, where interaction with large numbers of commoners likely took place.

7.2.5 Comparing the ceramic assemblages of Lote B and with those of other Lima sites

As discussed above, Lote B presents three occupational phases. Although the correlation between these occupations and the ceramics phases is less than perfect (see Chapter 2), it is possible to propose that the early and middle occupation are in the main associated with Middle Lima ceramic style, and the later occupation at the site with Late Lima ceramics. As noted, Lote B contains relative high quantities of decorated sherds, especially for a site with significant domestic component, and that was likely located at the intermediate level of the regional settlement hierarchy. Yet despite his difference in size and social scale, the decoration on pottery from Lote B assemblages differs little from assemblages published for Lima monumental sites such as: Pachacamac (Strong and Corbett 1943; Patterson 1966; Marcone 2000, 2011); Maranga (Jijon y Caamaño 1949; Kroeber 1954; Olivera 2009), and Cajamarquilla (Segura 2001; Gayton 1926) in the Rimac Valley; and Cerro Trinidad and other Lima sites in the Chancay Valley (Kroeber 1926, Willey 1943). The abundant decorated ceramics at this mid-level site, and the stylistic congruence to pottery from monumental sites in the core area of the Lima culture's political development, suggest that the circulation, use, and iconography of these ceramics played a role in the integration of this society, and/or were important items of social affiliation and distinction.

This abundance and similarity to core Lima sites was especially surprising for the early and middle occupations of Lote B. The middle phases of the Lima culture have been proposed to have been centered in the Chillón and Chancay Valleys, in the northern portion of the Lima

culture's area of influence, thus implying a peripheral position for the Lurín Valley during this time period. Previously, it was thought that only later in the Lurín sequence did Lima style ceramics come to resemble those found in the northern valleys (Earle 1972; Lavallee 1966; Marcone 2010). Although Middle Lima style ceramics were previously known for the Lurín Valley, these fragments were assumed to represent rare, local copies. The Middle Lima style ceramics recovered at Lote B (Figure 7, 10) display stylistic elements and decorative techniques identical to those in the northern valleys. In fact, the Lima style material we recovered from the lower and middle levels in our excavations at Lote B is sufficiently similar to that from the monumental sites that there is no reason to believe that the Lote B material was not produced in the same contexts.

For example, fragments similar to the ones labeled in Figure (7, 10) as 1 and 9 present classic examples of the main Lima motif - - the bi-headed serpent - - very similar in execution to the ones presented by Kroeber (1926, Fig. 11, 15 and plate 88c), Willey (1943) from the Chancay valley (Cerro Trinidad), and Falcon 2003 (photos 1 and 2). Fragment 3 is arguably part of the diagnostic Middle Lima motif called the "Octopus" (Escobedo and Goldhausen 1999, fig. 9). Fragment 2 displays a close resemble to the specimen illustrated by Willey in his Plate 7i (Willey 1943). Fragment 5 is similar to the fragments that Patterson described as part of his defining his Lima 5 period, using material from Cerro Culebras in the Chillón Valley (Paterson 1966, plates 3 a,b,c).

As of yet, we don't know if these ceramics were produced locally or if they were brought to Lote B and the Lurín valley from the main monumental sites. We don't know where they were produced, although in or around the larger centers seems likely. However, the similarities

in decoration suggest that they were part of an exchange system between the inhabitants of Lote B and residents of these major sites, or participated extensively in the same distribution network.



Figure 7-10, Middle Lima Style ceramics recovered at Lote B

Correspondingly, the Late Lima style fragments recovered from Lote B, associated mostly with the late occupation there, also show close resemblance to the materials known from the northern (Rimac y Chillón) valleys. This observation is consistent with the similarities proposed in the past between the later assemblages of Lima ceramics in the Lurín valley and assemblages from the Rimac Valley (Earle 1972, Lavalley 1966). The previous noting of stylistic and similarities was part of a larger observation that such regional similarities were likely to reflect stylistic standardization at this later period, included marked transformation of the Lima style. These changes included the switch to more abstract representation of the bi-headed serpent, and the greater restriction of the design to smaller, bounded areas on the vessels.

Lote B ceramics from the later occupation at the site show these traits. For example, fragments similar to the ones labeled 2 – 5 and 7 in the figure (7,11) have decoration

similar to fragments illustrated by Segura (2001) from the Tello compound in Cajamarquilla (especially fragments 5 and 7 in the illustrations showed by Segura in pictures 99-101; Olivera 2009:Figure 52; and Escobedo y Goldhausen 1999: fig 16). Fragment 8 is similar to the one presented by Olivera 2009: Figure 54). Nor did we find significant differences between the Lote B decorated pottery and the ceramics recovered in my 2009 excavation at the Little Mud-brick Compound of Pachacamac. Overall, therefore, it is currently impossible to distinguish between the decoration on the painted sherds from Lote B, and that on similar ware from the major centers of Pachacamac, Cajamarquilla or Maranga. The Lote B elite were not using “local imitations.”



Figure 7-11 Late Lima style ceramics recovered at Lote B

The biggest difference from major centers in terms of the decorated component of the Lote B pottery assemblage is that Lote B lacks Nievería style ceramics. This Nievería style, once thought of as post-Lima, in fact has been shown to co-occur with Late Lima style ceramics at several monumental sites. Yet this style is completely absent from Lote B. There are several explanations for this. One possibility is that Lote B was outside the circulation pattern of this pottery, which may, for example, have been brought by pilgrims to the large

centers. Alternatively, the activities in which this pottery was used at the major center were not replicated at Lote B. Or, the Lote B residents may have rejected the Nievería iconography and its associations.

More comprehensive, or quantitative comparison of the Lote B ceramic assemblages with those from other Lima sites (including the centers) is very difficult, based on what has been published. Most of these publications present only limited information on the frequency or proportion of the formal ceramic categories recognized within the assemblages. In addition, the definition of these categories is not always clear, nor comparable among sites and researchers. The information I have been able to derive on formal pottery categories at other Lima sites is shown in Table (7, 9).

Patterson (1996) provides information on formal categories by stylistic phase in his study, and in most cases, each phase can be associated with a particular site (Patterson 1966; Segura 2004). However, his study lacks information on the provenance of the ceramics, and in other cases, the sample used is a selection of sherds chosen from another researcher's sample. Therefore, his sherd sample can't be shown or assumed to be representative of the pottery at any given site, and is very likely skewed toward the highly decorated categories. Jijon y Caamaño excavated at Maranga, and he provides some detailed ceramic counts and general information on excavation context. Unfortunately, he doesn't discuss clearly how he defined the categories used, and the overall totals for categories are not provided. The ceramics distribution presented in Table (x,x) corresponds to Jijon y Caamaño's excavations at Huaca 3 (also known as Huaca Middendorf) . Also at Maranga, close to the so-called Huaca 20, the Pontificia Universidad Católica del Perú has been conducting salvage research for several years. This research is still under analysis and little has been published. The area of this work has been described as a

domestic village, but this attribution is belied by the lack of refuse accumulation, hearths, and the large number of burials between constructive phases, and the location within the borders of the Maranga public architecture complex. In fact, the artifact assemblage and context closely resemble those of the Little Mud-brick Complex of Pachacamac, suggesting that the space represents architecture secondary to the main mounds. In a Licenciatura thesis, Olivera (2009) discusses the architecture at this locus and associated ceramics. He does not present counts of ceramics, or the distribution of formal categories within the area, referring only to unpublished papers for this information.

To date, the only work published to date that presents both a clear discussion of pottery form distribution, and the criteria for this classification, is that of Segura 2001. This work presents data from a specific feasting context in the main plaza of one of the monumental buildings at Cajamarquilla (called the Julio C. Tello Huaca or mound) and deals with complete vessels and not sherds.

Reference	Site/Context	Ceramic	Archeological Context	Valley	Plates	Bowls	Goblets	Pot with neck	Pot without neck	Bottles
Paterson 1966	Playa Grande	Frag	Monumental	Chillon	0.092	0.016	0.170	0.087	0.013	0.022
	Culebras	Frag	Monumental	Chillon	0.207	0.021	0.156	0.045	0.008	0.000
	Copacabana	Frag	Monumental	Chillon	0.037	0.003	0.059	0.037	0.023	0.007
	La Uva	Frag	Monumental	Chillon	0.099	0.011	0.000	0.286	0.022	0.022
	El Carmen	Frag	?	Chillon	0.191	0.056	0.000	0.067	0.034	0.011
	Huaca Pucllana	Frag	Monumental	Rimac	0.050	0.025	0.000	0.238	0.025	0.013
Segura 2001	Cajamarquilla/Conjunto tello Plaza	Vessel	Monumental	Rimac	0.076	0.025	?	0.682	0.070	0.019
Olivera 2009 (Garcia 2007)	Maranga - Huaca 20	Frag ?	Burial/Domestic?/monu	Rimac	330 especimens	?		543 especimens		Little/N.I
Jijon y Caamaño 1949	Maranga - Huaca 3	Frag.	Monumental/compound	Rimac	0.164	0.128	0.068	0.116	0.109	0.039
Marcone 2000; 2011	Pachacamac - Little Mud Brick	Frag	Monumental	Lurin	0.251		0.03	0.153	0.198	0.029
Lote B	Domestic - Lote B	Frag	Domestic	Lurin	0.324	0.096	0.015	0.525		0.010
	Sector 1		Middens elite compound		0.356	0.086	0.024	0.497		0.008
	Sector 2		Domestic elite compound		0.311	0.088	0.007	0.549		0.008
	Sector 3		Monumental		0.245	0.152	0.013	0.576		0.013
	Sector 4		Monumental		0.290	0.129	0.006	0.523		0.026

Table 7-9 Pottery Form Proportions at Several Lima Sites

The information in the above table is partial, and should be taken as a starting point for more systematic, future analysis, but does hint at some general tendencies. First, bottles make up low proportions of the assemblages at every site, but are more abundant at cemetery contexts. The definitive design elements for the Lima style have largely been drawn from goblets and bottles, perhaps because these are more likely to be recovered complete from tombs. Burial excavations also represented the initial research focus in Lima culture archaeology. In sum, most of the canon of Lima decorative style has been based on two pottery forms that make up a small proportion of the Lima pottery assemblage.

Second, Lote B displays a relatively high proportion of plates. This difference could be because the Lote B excavations included more domestic components, and plates are a easily recognized form, often sans decoration. Therefore, the bias towards decorated pottery in the investigation at the other Lima sites might account for the relative under-representation of plates at these sites. Relatively higher proportions of plates also occur at the Little Mud-brick Compound, and in the lateral structures of Huaca 20. As discussed previously, these buildings likely served a secondary or complementary function to the main mounds at the respective centers. The mounds themselves, at Cajamarquilla or Maranga, yielded substantially lower proportions of plates, but higher proportions of jars and pots with necks. The latter vessels are more likely to have been used in connection with liquid contents, while plates and shallow bowls are more suitable for solid foods.

I have proposed elsewhere (Marcone 2011) that at least two, distinct feasting patterns coexisted in Lima society. In one pattern, associated with the main mounds and adjacent plazas, jars and pots were used to serve chicha, followed by the intentional, ceremonial breaking of these vessels. This pattern and its diacritical feasting character, has been clearly described for

Cajamarquilla by Segura (2001), and reported for other sites like Maranga and Pucllana in the Rimac valley. The second feasting pattern was spatially associated with secondary structures at monumental sites. In these contexts, where plates (and by extension, food serving) are more heavily represented, we are proposing this assemblage to represent more inclusive feasting practices.

If these initial conclusions hold after more comprehensive analysis of proportions of forms among different sites, we can propose that the activities held at the secondary buildings of monumental sites resemble those activities, even mimic or replicate, those conducted at secondary sites, or intermediate elite sites, such as Lote B.

7.3 BOTANICAL REMAINS

Organic preservation was very good at Lote B, including non-carbonized plant remains. These macro botanical remains were analyzed with the collaboration of Lic. Gabriela Bertone and Lic. Jessica Li from the Laboratory of Archeobotanical Research of Peru, and The Museum of Natural History of the UNMSM (see Appendixes 2 and 3 for the complete report). In general, this analysis aimed at identifying the specific taxa, represented, and in most cases, plants could be identified at the genus or species levels (Table 7.8). Of the total of 31 taxa identified, 15 probably served as food. In terms of representation, roughly 85% of the individual specimens correspond to economic plants (used as fuel, in craft production, or construction).

Species	Genus	Family	Class
<i>Arachis hypogaea</i>	<i>Canavalia sp.</i>	BROMELIACEAE	MAGNOLIÓPSIDA
<i>Bunchosia armeniaca</i>	<i>Capsicum sp.</i>	CUCURBITACEAE	LILIÓPSIODA.
<i>Canna indica</i>	cf. <i>Begonia</i>	CYPERACEAE	
<i>Cenchrus echinatus</i>	cf. <i>Chloris</i>	FABACEAE	
<i>Cucurbita máxima</i>	cf. <i>Puya</i>	POACEAE	
<i>Cucurbita moschata</i>	cf. <i>Sida</i>		
<i>Equisetum giganteum</i>	<i>Cucurbita sp.</i>		
<i>Gossypium barbadense</i>	<i>Erythina sp.</i>		
<i>Gynerium sagittatum</i>	<i>Phaseolus sp.</i>		
<i>Inga feuillei</i>	<i>Tillandsia sp.</i>		
<i>Lagenaria siceraria</i>	<i>Typha sp.</i>		
<i>Manihot esculenta</i>			
<i>Pachyrrhizus tuberosus</i>			
<i>Phaseolus lunatus</i>			
<i>Phaseolus vulgaris</i>			
<i>Phragmites australis</i>			food
<i>Polylepis racemosa</i>			fuel and craft
<i>Pouteria lúcuma</i>			brush, no known
<i>Psidium guajava</i>			domestic use
<i>Tessaria integrifolia</i>			undetermined
<i>Zea mays</i>			

Table 7-10 Plant taxa identified at Lote B

Food plants represent both cultivated crops, of which *Zea mays*, *Curbita sp.* and *Arachis hypogaea* (peanuts) are most common, and species from the ecosystem *monte ribereño* (coastal mounts) or *lomas* (ground fog basins) close by the site. All the taxa identified at Lote B correspond to species common to coastal sites and each probably is of local origin.

In comparing assemblages within and between sectors, I follow Miller's (1988) argument that such comparisons can use a relative index of density based on dividing the number of items

recovered by the volume of soil excavated. Such an index will allow us to identify, in relative terms, the differences in the representation of plants in each assemblage. Figure 7.10 shows a chart with density of each species by sector.

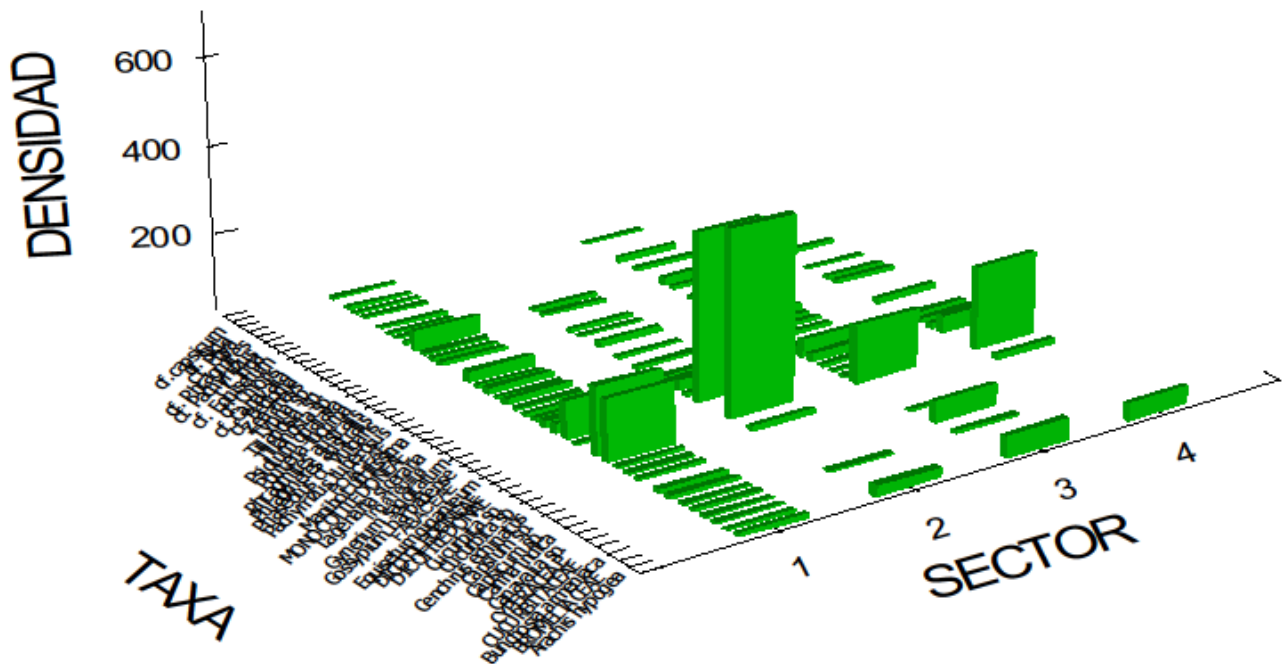


Figure 7-12 Plant taxa density by sector

In the above chart, the plants most with greatest density in each sector are the *Dicotyledoneae* and *Fabaceae* (legume) classes. These classes, which include hundreds of local species, may have been most commonly collected as fuel, and would probably also grow as weeds at the site. The most notable difference between sectors is the very limited diversity of taxa represented in Sector 4, when compared to Sectors 2 and 3, and especially Sector 1. If we further break analysis by phase and sector (fig. 7.11), we can see that the *Dicotyledoneae* and

Fabaceae classes were most common in both Middle and Late phases, and that Sector 1 displayed a greater variety of taxa than Sector 2 in both Middle and Late Phases.

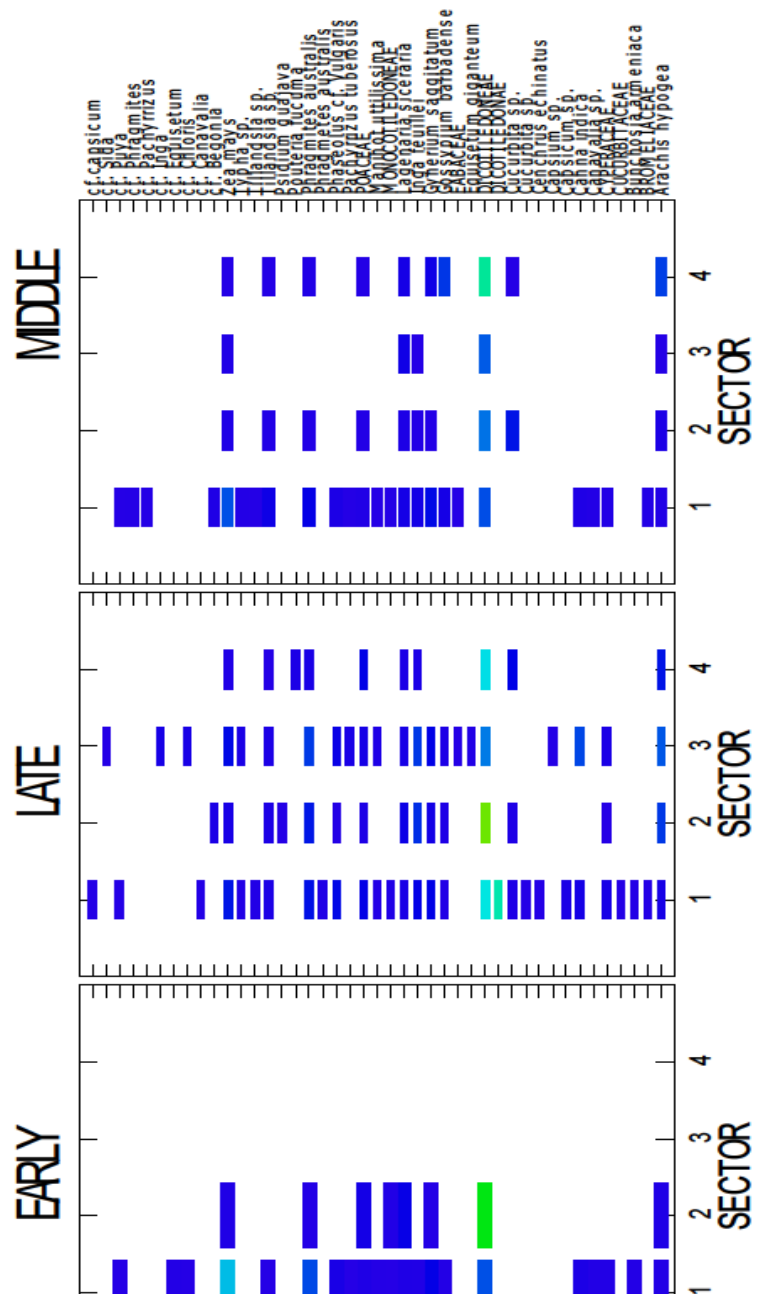


Figure 7-13 Taxa density, comparing sector by phases

To better examine dietary differences, analysis can be restricted to those known and common food taxa in the botanical remains (fig. 7.12).

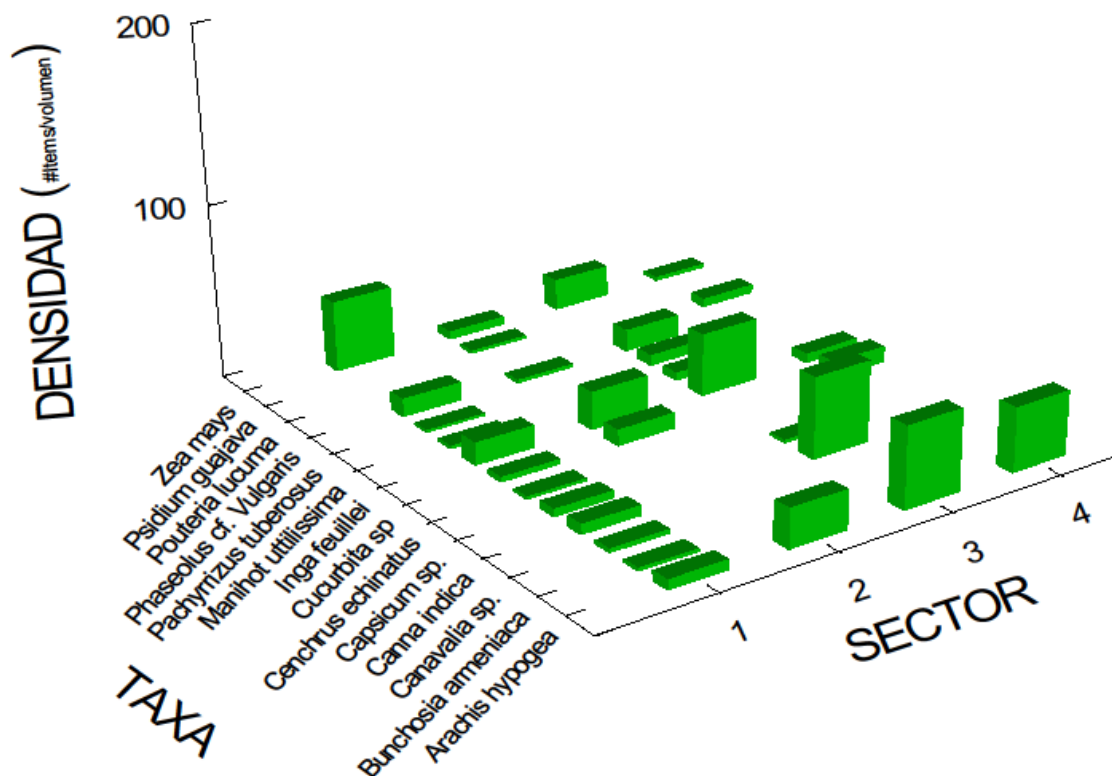


Figure 7-14 Food Items taxa density by sector

In some respects, the representation of food taxa resembles that of plant taxa as a whole. Sector 1 has by far the widest range of foods represented, and Sector 4 is by far the least diverse. Sectors 2 and 3 fall in the middle. One of the more common foods (except in Sector 4) is *Inga feuillei* (“pachay” or ice-cream beans). This is a pod-bearing tree, ubiquitous in Peru today. Sector 1 yielded specimens of almost all the species identified at Lote B (with the exception of *Pouteria lucuma*, which was identified in one specimen in a superficial layer of Sector 4 and

may be modern). Most of the Sector 4 specimens come from the midden unit, Unit 14. The limited taxa representation supports the hypothesis that Sector 4 served as a specialized, storage-oriented zone, where a narrow range of activities took place.

Sector 1 differs notably from the others in the high proportion of maize, and low proportions of peanuts. Figure 7.12 suggests some marked dietary differences between the residents of Sectors 1 and 2. There is no evidence (botanical or in grinding technology) that maize chicha was prepared in Sectors 3 and 4.

There are no indications of substantial variation through time in either taxa represented or in relative densities, so we can conclude there is nothing to indicate a major dietary shift at the site (fig. 7.13). Overall, the differences between the Early through Late Lima phases seen in Figure 7.13 can be related to the small sample size for the Early phase, and much larger sample size for the Late Lima (most of the excavated layers date to this phase).

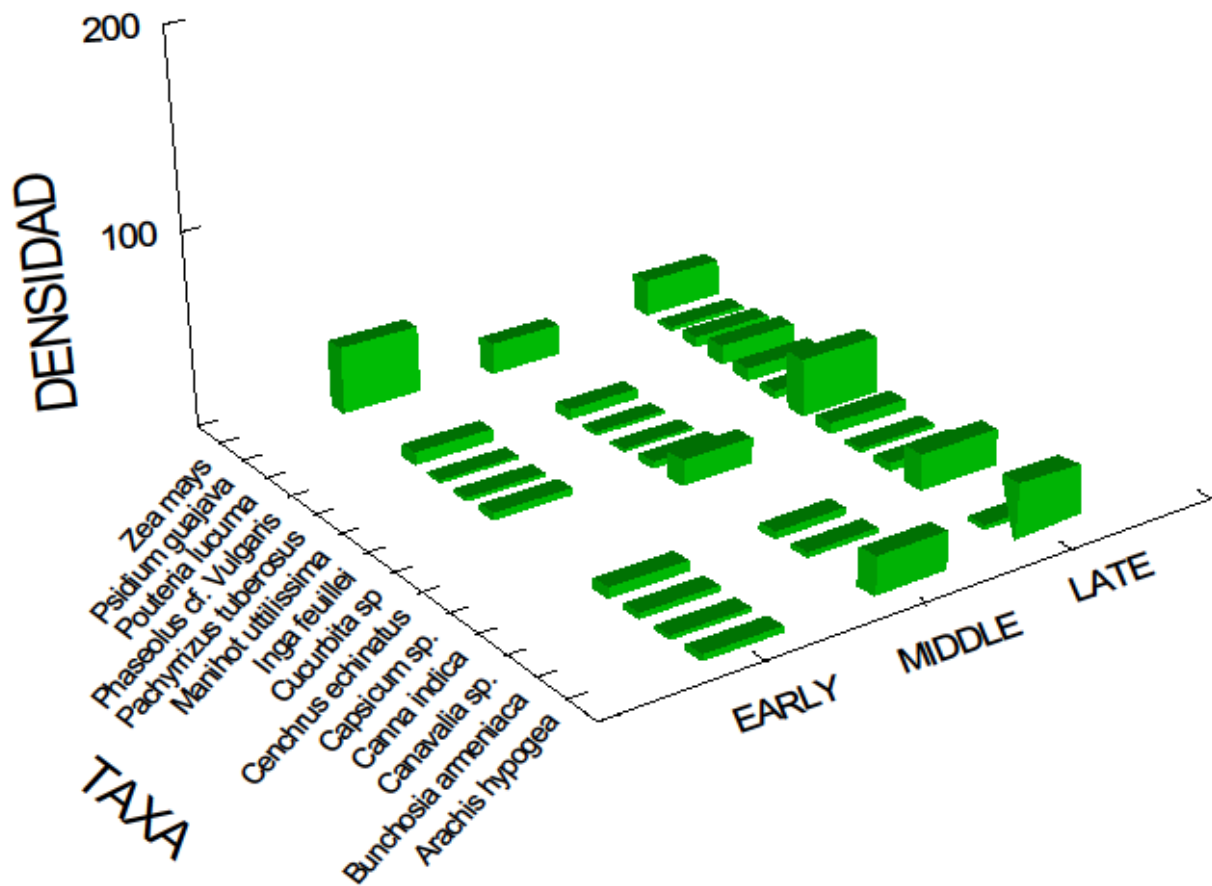


Figure 7-15 Food related plant taxa density by phase

Figure 7.14 presents the food taxa densities by unit in Sector 1. As expected, Units 2 and 3, as midden deposits, show the highest densities and greatest diversity. Units 7 and 8 were placed in storage rooms, so their assemblage does not represent food preparation and consumption activities.

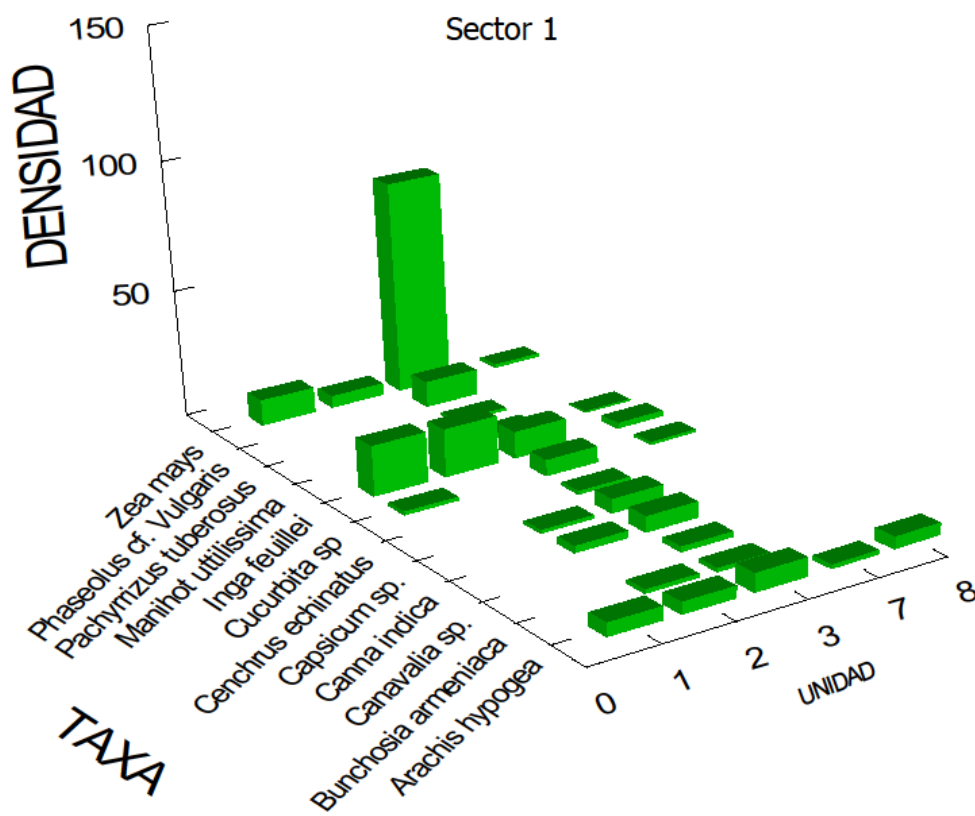


Figure 7-16 Sector 1 Food related taxa density by unit

Figure 7.15 presents food taxa density by unit in Sector 2. Comparing Figures 7.14 and 7.15 reveals how much less diverse the food taxa representation in Sector 2. Sector 2 lacked what could be thought of as staples (*Manihot*, *Canna* or achira), and flavorings (*Capsicum*). Sector 2 had, however, some patterns similar to Sector 1. Unit 5, with the highest densities and the most diversity, was a midden unit, as was Unit 9, the next most botanical dense and diverse unit. However, Unit 6 (also a midden unit based on fill characteristics and artifact densities), has relatively low densities, and limited diversity (only maize, pacay, and peanuts). As I will discuss below, Unit 6 differs sharply from other midden units in shellfish as well, which suggests that it

could represent an unordinary or specialized, midden, whose contents did not derive from daily food preparation and consumption.

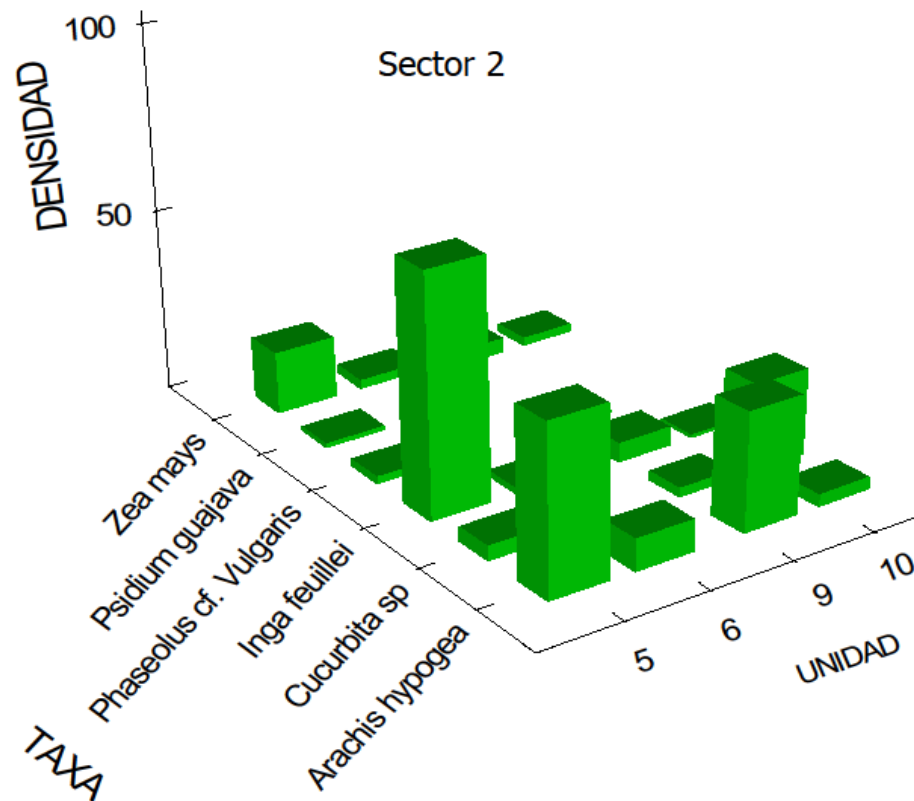


Figure 7-17 Sector 2 Food related taxa density by unit

Unit 10 was excavated inside one of the rooms of Sector 2, possibly of domestic function. As expected the density of plant remains is less than the Unit 5 and 9 middens, but, relatively high in comparison to the storage spaces of Sector 1, and, as will be seen below, in comparison to the rooms in Sectors 3.

The density of food plants by unit for Sector 3 is shown in figure 7.16. Unit 12 was in a room of the small architectural complex in Sector 3, and was interpreted in the field as a non-domestic structure based on the lack of domestic refuse, clean floors, and yellow upper building.

The moderate diversity of plant taxa suggests movement of edible plants in and out of the building. Units 11 and 13 were identified in the field as refuse deposits, and the density and diversity of food taxa in Unit 11 supports this interpretation. In contrast, Unit 13 was a midden locale located directly beneath the central plaza of the monumental Yellow Building of Sector 3. This unit was placed here as the most likely locale to yield material from plaza activities. Although the unit presented a very high density of refuse, ash, and charcoal, the density of food remains is relatively low, and the variety relatively limited. These characteristics are not readily reconciled with the proposed inclusive “feasting” activities suggested by the stratigraphic and ceramic evidence. However, the nature of the food plant remains could also indicate that the commensal activities here involved consumption of a limited variety of foods prepared elsewhere.

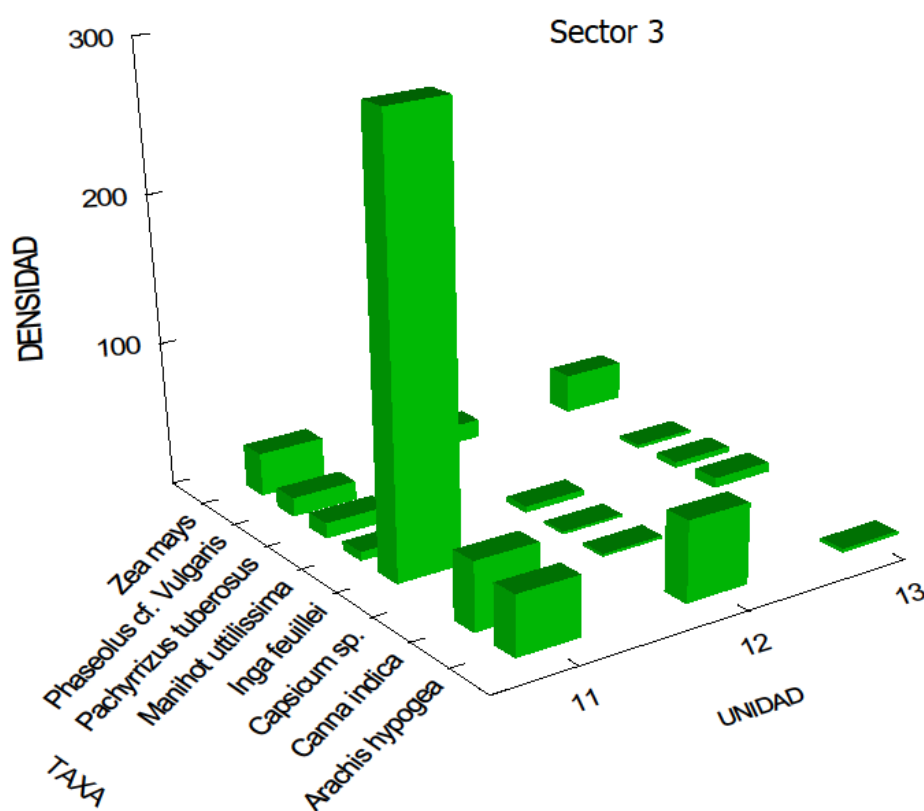


Figure 7-18 Sector 3 Food related taxa density by unit

Sector 4 (fig. 7.17) shows some of the lowest food taxa densities at the site. Although the upper layers of Unit 14 were identified as refuse deposition, the proportion of food remains was low. Unit 14 was located outside the doorway of building with proposed storage functions. The low - densities and very limited variety in this unit is consistent with edible plants moving through the building, rather than with food preparation.

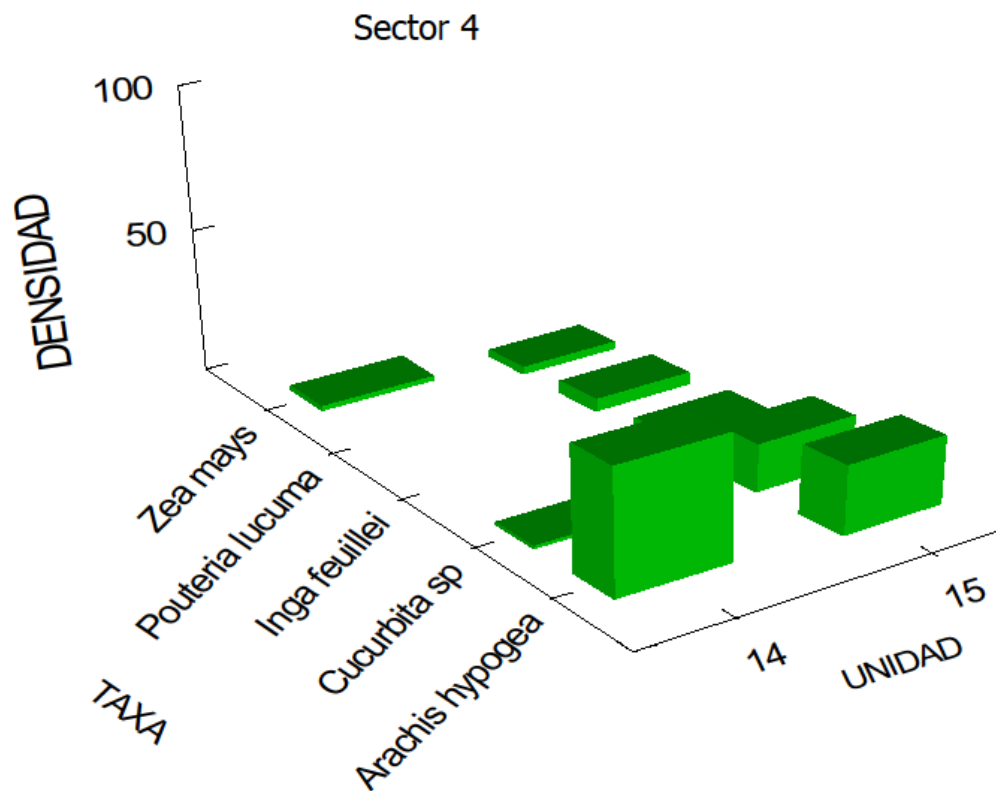


Figure 7-19 Sector 4 Food related taxa density by unit

7.3.1 Summary of botanical analysis

Three main points emerge from the analysis of the botanical remains. First, there is no evidence for any changes in diet at the site between the Middle and the Late Lima phases.

Second, there were potentially consumption differences between the residents of Sectors 1 and 2, with the residents of Sector 1 eating a more diverse diet. Sector 2 exhibits most of the same basic staple, items, but lacks many of the supplementary or non-staple plants of Sector 1. The plants from Unit 6 of Sector 2 suggest that this was an unordinary midden, representing some form of special category of food consumption. Third, the distribution of plant densities and taxa supports the functional differences proposed between Sectors 1 and 2 versus Sectors 3 and 4. The relatively lower botanical densities and less diverse plant assemblages in the latter sectors are consistent with their non-domestic, public and storage functions. The plant remains in these sectors could represent limited food preparation, serving of a limited variety of food prepared elsewhere, storage of plant foods, or a combination of these activities.

7.4 SHELLFISH ANALYSIS

The study of the shellfish remains from Lote B was geared to look at temporal and intrasite variability in diet. For the purposes of this study, I assume that the shellfish remains represent food, although I recognize that the shells could serve non-subsistence purposes as well. The analysis presented below identifies the taxa represented in each context, and uses calculations of the minimum numbers of individuals (MNI) of each taxon. A relative small number of terrestrial snails were represented in Lote B (342 fragments/completes shells), all belonging to *Scutalus proteus* (*caracoles de Loma*) a species native to the Lote B environs. Because 98% of the mollusc sample is marine bivalves (Table 7.11), analysis will be limited to this category.

BIVALVOS	3720	97.90%
GASTROPODOS	71	1.80%
POLIPLACOFOROS	10	0.30%
TOTAL	3801	100%

Table 7-11 Types of shellfish identified at Lote B

ESPECIES IDENTIFICADAS	Valvas Completas	Valvas Incompleta	Fragmentos Diagnosticos	Total	%
Perumytilus Purpuratus	1142	303	174	1619	42.61%
Alaucomya ater	1	0	7	8	0.20%
Semimytilus Algosus	133	188	515	836	22.00%
Choromytilus chorus	1	2	84	87	2.30%
Argopecten Purpuratus	0	0	5	5	0.13%
Mesodesma Donacium	163	90	902	1155	30.40%
Donax(D)marincovich C.	1	1	2	4	0.11%
Mulinia edulis	0	0	1	1	0.02%
Protho thaca thaca	0	0	1	1	0.02%
Concholepas concholepas	3	0	1	4	0.11%
TOTAL				3720	97.90%

Table 7-12 Bivalve species identified at Lote B

Lote B was (and is) only 10 km from the shore, so it is expected that marine shellfish would form a widely exploited resource. In fact, three species were of much greater importance than the others, *Perumytilus purpuratus* and *Mesodesma donacium*, followed by *Semimytilus algosus*. The other seven species together barely make of 16% of the sample (Table 7.12). All three species well-known at prehispanic coastal sites. *Pe. purpuratus* and *Se. algosus* are commonly known as mussels (*choros*) and come from rocky beaches (Tokeshi 1995; Sandweiss 1996; Claassen 1998), while *Mes. donacium* is known as a surf clam (*macha*), and is harvested from sandy beaches (Sandweiss 1996; Claassen 1998). The shoreline of the Lurín Valley is almost exclusively composed of sandy beaches, and it is necessary to go far beyond the edges of

the Valley to find rocky beaches, so *Mesodesma donacium* represents the resource with the lowest travel costs to obtain.

The MNI distribution of the species is presented in Table 7.13. Not surprisingly, the domestic sectors exhibit more shellfish (Sector 2 followed by Sector 1) than do the non-domestic Sectors 3 and 4. Sectors 3 and 4 have significantly fewer varieties of shellfish represented, as well. In most of the domestic refuse and midden contexts of Sectors 1 and 2, shellfish remains are roughly proportional to sherd densities. This is not the case for Sectors 3 and 4, where even the midden deposits in Sectors 3 and 4 contain very little shell. This pattern is further evidence that the activities generating Sector 3, Unit 13 assemblages, for example, were limited to consumption (feasting) as indicated by the high density of serving vessels (particularly bowls), and not food preparation itself. Similarly, the few shellfish specimens from the midden layers of Unit 14 of Sector 4 (located outside a main entry to a storage/public building) suggest that shellfish related activities were not part of the building's use.

[illegible]

	Unit 4								Unit 5								Unit 6								Unit 9								Unit 10							
	Pp	Aa	Sa	Cc	Ap	Md	Me	Pt	Coc	Pp	Aa	Sa	Cc	Ap	Md	Me	Pt	Coc	Pp	Aa	Sa	Cc	Ap	Md	Me	Pt	Coc	Pp	Aa	Sa	Cc	Ap	Md	Me	Pt	Coc				
Late phase	2								134 2 50 2 17 1																94 63 4 33								8 3 1 1 7							
	24 1 54 2 37								71 97 2 20 1																35 12 4 1 16 1															
									2 2 57																															
Middle phase																	2 2 1								3 5 1 20								5 14							
																	6 1 1 10																25 1 1 33							
																																	69 5 19							
																																	10 19							
Early Phase																	1 1 2																84 58 1 42 2 1							
																	1																							

[illegible]

		Unit 14								Unit 15												
		Pp	Aa	Sa	Cc	Ap	Md	Dm	Me	Pt	Coc	Pp	Aa	Sa	Cc	Ap	Md	Dm	Me	Pt	Coc	
Late phase	1					1					1							11				
	4	1	1			1					1							5				
Middle phase	5	1				3																
	1	1		1		3																
	5					16																

	Sector 1										Sector 2									
	Pp	Aa	Sa	Cc	Ap	Md	Dm	Me	Pt	Coc	Pp	Aa	Sa	Cc	Ap	Md	Dm	Me	Pt	Coc
Late Phase	0.028	0.0006	0.013	0.003	0.0002	0.013	0.0001				0.053	0.0004	0.04	0.002	0.0003	0.027		0.0001	0.0001	0.0001
Middle Phase	0.015		0.006	0.002		0.044					0.025		0.003	0.0006	0.0002	0.024				
Early Phase	0.009			0.009		0.141					0.056		0.039	0.0007		0.03	0.001			
Total	0.025	0.0006	0.011	0.003	0.0002	0.017	0				0.044		0.027	0.001	0.0002	0.026	0	0	0	0

	Sector 3										Sector 4									
	Pp	Aa	Sa	Cc	Ap	Md	Dm	Me	Pt	Coc	Pp	Aa	Sa	Cc	Ap	Md	Dm	Me	Pt	Coc
Late Phase	0.015		0.001			0.017				0.0004	0.008	0.001				0.021				
Middle Phase	0.028					0.083					0.018	0.003		0.001		0.036				
Early Phase																				
Total	0.015		0.001			0.018				0.0004	0.001	0.0002		0.001		0.003				

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The shellfish distribution also suggests dietary differences between Sectors 1 and 2, with more shellfish consumption in Sector 2, except in that sector's Unit 6 midden (table 7.14). This midden, discussed in Chapter 4, exhibited a high density of non-food botanical remains, sherds, and charcoal, but very little food plant remains, and very little shell. Most of the shellfish remains in the unit were found associated with the tamped surfaces below the midden. The relative lack of shellfish and plant food remains indicates, again, that the Unit 6 midden was not generated by normal household activities or food preparation tasks.

7.4.1 Temporal changes in shellfish consumption

In most of the multi-phase units at Lote B, shellfish representation is significantly higher in Late Lima phase deposits than in the Middle Lima ones, indicating a marked dietary shift to greater shellfish consumption. Unit 10 of Sector 2, the only unit excavated in an indoor space of the architectural complex in this sector, has a relatively large quantity of shellfish overall, but (aside from Layer F), a strikingly low proportion of *Se. algosus* in comparison to other Sector 1 and 2 assemblages. As discussed in Chapter 4, most of Unit 10 consisted of a series of house floors and pit features dating to the Middle Lima phase, and associated with Middle Lima style pottery. Only the uppermost occupation, which was close to the site's surface, and highly eroded) dates to the Late Lima phase.

Examination of Table 7.11 reveals suggests another possible chronological trend best seen in comparing Unit 10, with, for example Unit 5 of the same sector. This trend is higher proportions of *Se. algosus* in Late Lima phase contexts (fig. 7.18). In Units 2 and 3 of Sector 1, for example, the number of *Se. algosus* increases dramatically between Layers C and B. In most of the Sector 1 and 2 contexts *Se. algosus* only occurred infrequently below Layer B,

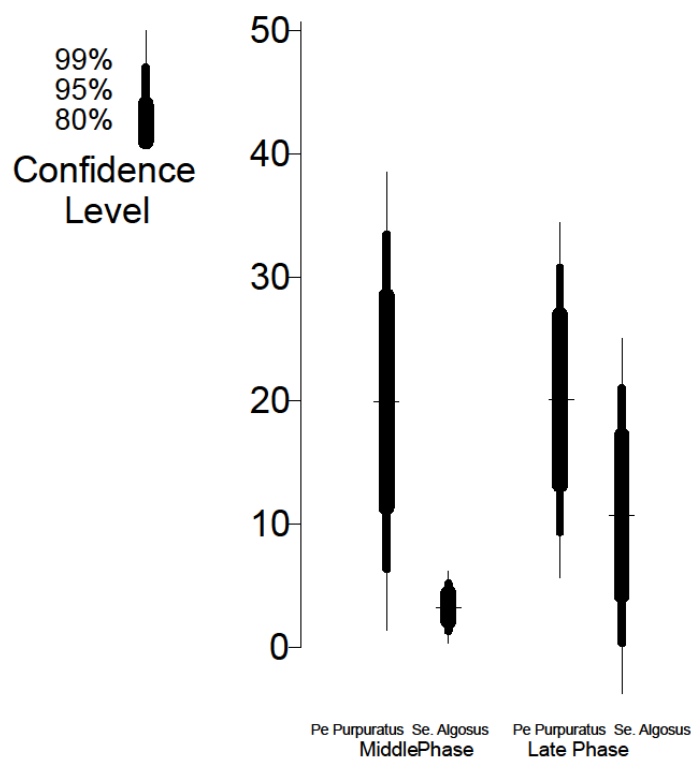


Figure 7-20 Average MNI by layer comparison of *Perumitylus Purpuratus* and *Semimytillus Algosus* by phase

There are a number of possible explanations for this shift in mussels. Both species inhabit the same rocky shoreline habitats: *Pe.purpuratus* favoring the upper intertidal zone, and *Se. algosus* the middle and lower intertidal zones (Sandweiss 1996; Navarrete, Broitman et al. 2008). One possibility is simply a change in taste preferences. However, I feel this is unlikely, because having collected and eaten each myself, I can attest to their being no differences in individual shellfish size, difficulty of extraction from shell, appearance outside of the shell, or taste, between the two species of mussel.

A second possibility is that the shift in relative proportions reflects an environmental change. Excavation at the Late Intermediate period coastal site of Lo Demas revealed similar

shifts in the proportions of *Pe. purpuratus* and *Se. algaus* during the occupational sequence (Sandweiss 1996). The investigator at the site, Daniel Sandweiss, also discarded the idea that these changes could correspond to shifts in cultural preferences, noting that because both of these mussels were likely extracted in similar ways and appear in similar environments together, and it is, “likely that ancient Peruvians considered them equally edible” (Sandweiss 1996: 140). *Pe. purpuratus* is known to more sensitive to warm water, and thus more likely to be impacted by ENSO events than *Se. algaus*. That a mega ENSO effect affecting the central Peruvian coast at the start of the Middle Horizon Period, has long been proposed (Shimada 1991; Shimada, Barker et al. 1991). Are the changes in mussel consumption at Lote B evidence of this? I believe not, for two reasons. First, the Late Lima phase at Lote B also saw a moderate increase in *Choromytilus chorus*, a cold water mussel of the lower intertidal zone. This increase casts doubt on the possibility of a major change in water temperature in the Late Lima phase. Nor are known warm water species such as *Argopecten purpuratus* found at the site. This species tends to rapidly colonize areas of cold water mollusk abandonment during ENSO periods (Tokeshi 1995). The second argument against an environmental cause is the lack of decline of *Me. donacium* in the Late Lima phase assemblages at Lote B. This clam population is particularly susceptible to ENSO phenomena, and takes longer than mussels to recover (Sandweiss 1996; Navarrete, Broitman et al. 2008).

A third possibility, that I can only tentatively put forward, is that of a possible alteration in diet breadth. Lower intertidal species such as *Se. algaus* are slightly more difficult to harvest, so turning to this “higher acquisition cost” prey item could indicate a relative intensification in shell fish harvesting. This change would be consistent with the overall greater shellfish

consumption seen in the Late Lima phase. A more thorough study of the size and age of the shellfish in my sample might resolve this issue.

7.5 TEXTILES DISTRIBUTION

During the excavations at Lote B we recovered 514 textile fragments. Textiles were made primarily from cotton, but there some fragments of wool, or with a wool/cotton mix. Only two of the textile fragments, from Unit 11, Sector 3, exhibited any decoration. These consisted of two pieces of tapestry, possibly parts of two different belts, made in the Lima technique. Table 7.15 presents the distribution of textile fragments by sector, unit and layer. Lacking an MNI technique, the number of fragments is not a good measure of the number of discarded textiles, as one item of clothing can break up into many fragments. Nevertheless, as a general measure of the rate of textile discard, the numbers in Table 7.16 are useful.

As expected, the highest quantities of textile fragments were found in the domestic refuse middens (Units 2 and 3) of Sector 1, indicating textiles here were entering the same discard stream as most domestic refuse. What was unexpected was the near absence of textile fragments from Sector 2, even in such midden deposits as Units 4, 5, and 9; middens rich in most other artifact categories. At present, I have no explanation for this inter-sector difference.

Neither Sectors 3 or 4 have significant quantities of textile remains, but Units 11 and 13 of Sector 3 include the two tapestry fragments, and what was likely a weaving toolkit. These distribution suggest that the activities carry out in the lower building of sector 3 (Unit 11 and 12) were linked with textiles distribution. Although further research will be necessary for prove or reject this idea.

	Sector 1					Sector 2					Sector 3				Sector 4		
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8	Unit 4	Unit 5	Unit 6	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 17	Unit 14	Unit 15	Unit 16
Late Phase	0	24	24	0	0	0	2	0	0	2	4	0	1		0	0	0
	11	18	93	1	0	2	4		0		7	0	0		0	0	
		8	55	0			0					0	0				
				0								0	0				
												0	0				
											23						
Middle Phase		1	1				2	0	0		0				0		
		1	193				0		0		0				0		
							0		0						0		
									2						0		
Early Phase			23				0		3								
							0										
							0										

Table 7-15 Textile fragment distribution by sector, unit and layer

7.6 LITHICS DISTRIBUTION

Most of the chipped stone tool material at Lote B derived from small to medium size cobbles obtained nearby from the river valley. A lithic analysis is not yet available for Lote B, so the section below will simply examine the density and proportion of lithic artifacts by context (Table 7.16 and 7.17). This exercise is a simple way of assessing relative involvement in stone tool production/use. Because of the deflation that has taken place at the site, as with ceramics, I pay less attention in most cases to representation in the active Layer A.

	Sector 1					Sector 2					Sector 3				Sector 4		
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8	Unit 4	Unit 5	Unit 6	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 17	Unit 14	Unit 15	Unit 16
Late Phase	5.3	155	2.5	54.58	0	0	11.25	0	17.85	7.09	10	8	5	N.I.	0	0	
	40.95	16.67	5	5.59	0	165	2.5		48.89		1.6	6.25	40		1	2.31	
		17.78	20	8.08			5.83					2.34	12.85				
				0.41								0	11.25				
Middle Phase												0	0				
												1.56					
Early Phase																	

Table 7-16 Lithic densities by sector, unit and layers

	Sector 1					Sector 2					Sector 3				Sector 4		
	Unit 1	Unit 2	Unit 3	Unit 7	Unit 8	Unit 4	Unit 5	Unit 6	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 17	Unit 14	Unit 15	Unit 16
Late Phase	0.018	0.022	0.004	0.724		0.009		0.027	0.074		0.112	0.214	0.158	N.I.			
	0.024	0.023	0.003	0.034		0.12	0.005		0.022		0.045	0.16	0.054		0.002	0.071	
		0.033	0.048	0.543		0.009						0.13	0.054				
				0.007								0.055					
Middle Phase																	
Early Phase																	

Table 7-17 Lithic proportions (lithic: sherd) by sector, unit, and layer

As expected, lithic densities are higher in Sectors 1 and 2, than in the non-residential Sectors 3 and 4 (fig. 7.19), with the highest densities of lithics occurring in midden units, particularly Unit 9 of Sector 2, and Units 1 and 2 of Sector 1, although these same contexts did not exhibit the highest proportions of lithics. Also, as expected, lithic densities were generally lower in the non-domestic middens of Sectors 3 and 4, with one exception. This exception is Unit 13 or Sector 3, the “unordinary” Late Lima phase midden. Here, densities in Layers B - D are comparable or greater to that of middens in Sectors 1 and 2; further indication of the special

nature of this Sector 3 deposit. The proportion of lithics in these same layers (.05), is actually a little bit greater than most of the domestic contexts of Sectors 1 and 2. Thus Unit 13 of Sector 2 presents the only evidence for significant involvement with stone tool manufacture/renewal/discard in the non-domestic sectors.

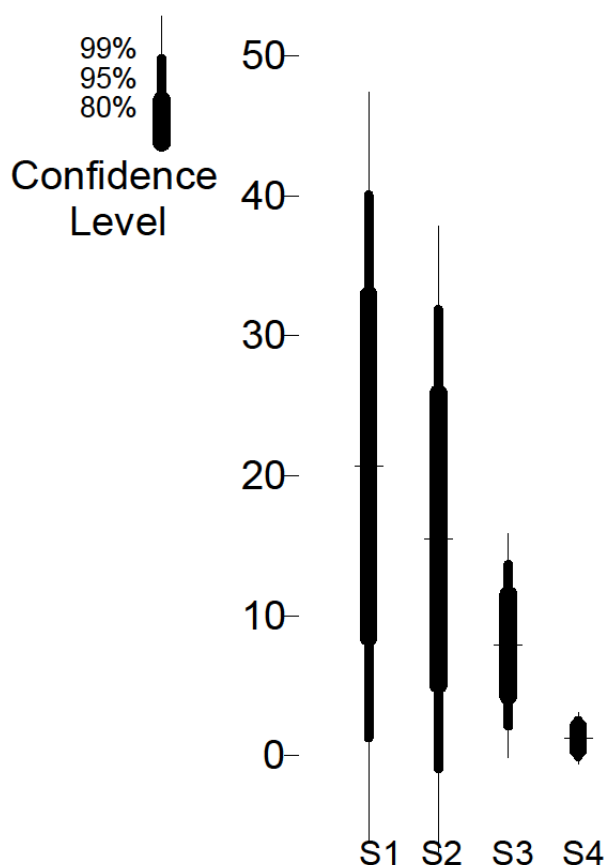


Figure 7-21 Lithic densities by sector

The second pattern observable in the lithic distribution is a potential increase in involvement in lithic activities in the Late Lima phase (figs. 7.20 and 7.21). This increase is strongly shown in the lithic density calculations (Table 7.14) combining all sectors (fig. 7.20), and in the residential Sectors 1 and 2. On the other hand, the proportional comparisons combining all sectors does not show such an increase (fig. 7.21).

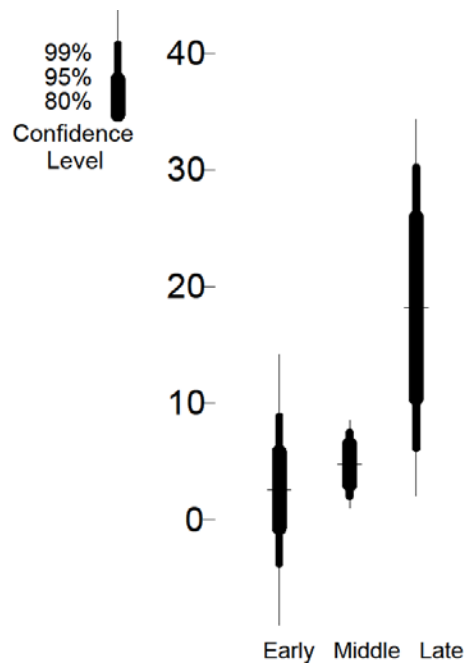


Figure 7-22 Lithic densities by phase

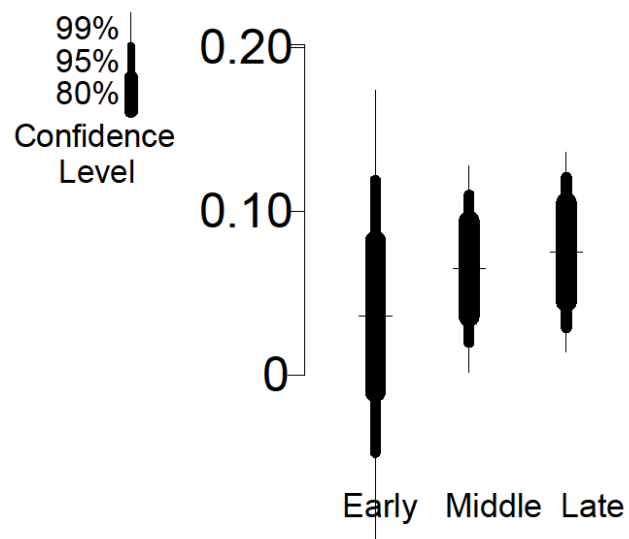


Figure 7-23 Lithic proportions by phase

7.7 OTHER MATERIALS AND NON-WEALTHY ELITES

A handful of specimens from other artifact categories were found, but not in quantities that allow quantitative analysis. For example, we recovered seven clay spindle whorls, three from the middens of Sector 1, and the others from Sector 2. The only items of jewelry found were two small pendants from the middens of Sector 1. This small quantity was disappointing given the elite nature of the Lote B residents, but is perhaps very revealing as to the nature of social inequality in the rural Lima polity, and the status of the Lote B intermediate elites.

7.8 CONCLUSIONS

The goals of the assemblage analysis were to identify: (1) functional differences among sectors; (2) deposits representing different types of behaviors within and among sectors; (3) changes through time in activities at Lote B; (4) elite ceramic style preferences; and (5) wealth and craft objects acquired by the resident elite.

The assemblages from Sectors 1 and 2 differed from those of Sectors 3 and 4 in ways consistent with domestic versus public ceremony/storage functions. Sectors 1 and 2 exhibited higher overall sherd densities (including in midden deposits), higher densities of lithics, and more and more varied shellfish remains. Serving vessels (plates and bowls) made up a similar proportion of the diagnostic assemblage in each sector, but in Sectors 1 and 2 bowls were a small proportion of the serving vessels. Bowls were a significantly larger proportion of the serving assemblage in Sectors 3 and 4, suggesting greater involvement in serving of liquids (stews, beverages) in those sectors. In contrast, specialized drinking vessels (bottles and goblets), were

relatively rare in Sectors 3 and 4, and more common (but still in very low proportions) in the residential sectors.

There was further variability among the sectors indicative of food consumption patterns. Sector 1 exhibited a much more diverse assemblage of plants (overall) and of food plants than did Sector 2, suggesting significant dietary difference between the residents of these two sectors. On the other hand, Sector 2 exhibited markedly greater quantities of shellfish.

The assemblages from Sectors 3 and 4 also differed from one another in several ways. Sector 3 exhibited a greater variety of plant taxa, and of food plant taxa, than did Sector 4 (or Sector 2), indicating a greater emphasis on food consumption or crop storage in Sector 3 than in Sector 4. Lithics were also significantly denser in Sector 3 than Sector 4, perhaps reflecting great consumption activities or crop processing in the former sector.

Comparing midden deposits (Table 7.18) illuminates some of the differences in activities taking place at Lote B. These middens were identified as such by their high ceramic densities, as well as by their fill characteristics (large quantities of ash, charcoal, high organic content, etc).

	Sector 1 Unit 2	Sector 2 Unit 6	Sector 3 Unit 13	Sector 4 Unit 14
Context	plaza between residences	Outdoor	plaza of Yellow Building	outside storage structure entrance
sherd density	500+	500+	500+	500+
proportion of decorated sherds	8 - 14	11	4 - 9	6 - 9
Local style pottery?	yes	Yes	No	no
lithic density	high	Low	high	low
food plants	high density diverse	low density not diverse	low density not diverse	low density not diverse
shellfish	abundant diverse	low abundance not diverse	Rare not diverse	rare diverse
Textiles	yes	No	Yes	no

Table 7-18 Comparison between middens deposits

This table presents four midden assemblages derived from distinct activities. Unit 2 (Sector 1) can be interpreted as typical domestic midden, and is representative of similar deposits found in Sectors 1 and 2 at Lote B. This particular unit was in a plaza space between residential complexes, not far from a large hearth or fire pit (Sector 1). Unit 6, in an outdoor terrace locus in the residential zone of Sector 2, represents an unordinary midden. The limited variety of plant and shellfish species indicates that it did not form from everyday food preparation/consumption activities. Therefore, Unit 6 also shows that special consumption activities or events were taking place in residential Sector 2. In Units 13 and 14 we see high densities of serving vessels (plates and bowls). But in both cases, the food plant assemblage is of low density and very limited in variety. The evidence for a high level of serving and consumption, but with little evidence of food preparation, is consistent with communal consumption of feasting activities in these public/storage sectors. The differences between these two middens in lithics and shellfish suggest that they represent slightly different generative activities, as well. This interpretation is supported by the stratigraphy of these units, which suggests a relatively short, even episodic, time span of midden accumulation, in contrast to the Unit 2 type middens.

7.8.1 Diachronic Changes

The excavations allowed me to assess changes through time in activities and stylistic preferences at the site between the Middle Lima and Late Lima phases. There was no significant change in ceramic assemblages. The proportions of decorated pottery, and the proportions of vessel types in use did not shift. The density of lithics greatly increased with the Late Lima phase. Lacking a full lithic analysis, it is not possible to frame consideration of this change in

patterns of stone tool craft production. However, as primary functions of chipped stone tools are food production and processing, I hypothesize this shift marks greatly increased food preparation/serving activities, additional processing activities associated with the material stored in Sectors 3 and 4, agricultural intensification, or a combination of these.

There was no significant shift in plant usage (as seen in density or taxa), or changes in the botanical differences among Sectors 1, 2, and 3, from the Middle to the Late Lima phases. Throughout Lote B's occupation, the principal shellfish exploited were *Perumytilus purpuratus* and *Mesodesma donacium*, and *Semimytilus algosus*. However, shellfish consumption increased dramatically in the Late Lima phase, with *Semimytilus algosus* making up a larger proportion of the Late Lima phase mollusks. This shift in species representation may be linked to the increased emphasis on shellfish harvesting.

7.8.2 Non-wealthy elites?

Generally, the assemblages from Sectors 1 and 2 exhibited higher proportions of decorated pottery than those of Sectors 3 and 4, indicating that use of decorated pottery was common in everyday domestic life, and that the decorated pottery of the site did not serve special display purposes in public or ceremonial contexts, including in the putative feasting activities of Sectors 3 and 4. The ceramic tradition I have called Local Lurín, characterized by roughly finished pots and jars, was limited to Sectors 1 and 2. Only a couple of fragments of the "Wari-influenced" Nieveria style pottery were recovered from the site. The lack of this ware at Lote B may be chronological in nature, as some archaeologists have argued that Nieveria pottery did not appear in the Valley until Epoch 1B of the Middle Horizon, after Lote B's abandonment. However, other archaeologists have argued that the Nieveria style was contemporaneous with

Late Lima style pottery, in which case the Lote B elites were choosing not to use it, and thus not stylistically affiliating themselves with the ideology or Wari connection that it represented.

Notable for their virtual absence from the excavated assemblages at Lote B were semi-precious stone, non-local shell such as *Spondylus*, metal objects, and imported pottery. With the exception of two pendant and two tapestry fragments, there were no exotic, non-local, or obvious luxury items. Nor was there much in the way of items of adornment, such as beads. The grave goods in the burials encountered do not suggest that these items were disappearing into mortuary contexts.

The lack of these materials in my excavations argues that Lote B residents were not particularly wealthy, were not highly involved in the circulation and display of luxury craft goods, and were not highly involved in exchange of sumptuary goods. I have not quantitatively compared Lote B to other sites in this regard, but if the residents *had been* involved in these activities to any significant degree, we would certainly expect to have found evidence for it in the extensive midden samples.

8.0 SOCIAL LEADERSHIP AT LOTE B

Lote B proved to be a hilltop elite residential complex, rather than a village with some elite households. Lote B was made up of a set of large architectural complexes, arranged to form four distinct sectors. Excavation determined that Sectors 1 and 2 were residential in nature, while Sectors 3 and 4 had public ceremonial/storage functions. Some Early Lima phase (c. AD 50 – 350) strata were found at Lote B, but this project focused on the Middle (c. AD 350 – 500) and Late Lima (c. AD 500 – 700) phases. The commoner population lived in dispersed homesteads or hamlets at the base of the hill, and probably in the river plain as well. The goal of my research was to explore the nature and development of the Lote B elite political strategies as the site was incorporated into the still poorly understood, multi-valley Lima polity that dominated the central Peruvian coast.

8.1 EVOLUTION OF THE SITE

One of my research objectives was to reconstruct the evolution of Lote B as a settlement. It is likely that at least from the Middle Lima phase, if not earlier, the hilltop residents at Lote B constituted a special segment of the population, an elite, as indicated by the relatively high proportion of decorated pottery in Early and Middle Lima phase deposits in comparison to non-elite sites. By the Middle Lima phase, the hilltop was intensively occupied, as evidenced by

dense domestic middens (for example in Unit 3, Sector 1). The earliest occupation may have been concentrated in Sector 2. Domestic occupation in the Middle Lima phase was focused in Sectors 1 and 2, although we cannot yet describe Middle Lima residential architecture, or estimate the size of the Middle Lima resident population. The Middle Lima phase contexts investigated include refuse loci, outdoor activity surfaces, and a cemetery in Sector 4 (Unit 14).

Lote B was transformed in the Late Lima phase, with the construction of the architectural complexes in Sectors 3 and 4. The relatively shallow deposits in these sectors indicate a short occupational span, and the stratigraphy, associated ceramic styles, and architectural styles indicate that the Sector 3 and 4 construction was contemporaneous with the last phase of occupation in Sectors 1 and 2. As described in Chapters 5 and 7, both the architecture and the lack of normal domestic refuse in Sectors 3 and 4 indicate their non-residential functions.

Sector 3 held two building units; a large compound with a 15 x 20 m enclosed plaza, and a small building of seven rooms. Unit 16 exposed an elaborate interior stairway, and yellow painted walls, in a central room or patio of the large compound. Unlike the architecture of Sectors 1 and 2, the Sector 3 large compound was built of small, mud bricks. Both the color and construction of this building underscore its local significance. Yellow painted public buildings feature at other Lima culture centers, including the Old Temple of Pachacamac, Maranga, and Huaca Pucllana (Flores 2005).

Sector 4 contained a semi-rectangular, well-maintained building, composed of two clusters of small rooms separated by a plaza space. Access to the interior spaces was restricted to a single main entryway. There are indications that the walls were painted yellow, interior and out, similar to the Sector 3 public building. Some of the small rooms measured 2 x 2 m, and at least several of the larger ones were subdivided into smaller (1 x 1 m) storage spaces. The

evidence from architecture and excavation points to this building functioning as a specialized storage structure. The size and layout of the storage chambers is consistent with storage of agricultural crops, and by analogy with arguments made for Wari and Inka storage facilities, the many redundant small storage chambers could represent storage quotas for segments of the population, such as households.

Most of the architecture visible on the surface in Sectors 1 and 2 also dates to the Late Lima phase. Sector 1 was composed of two areas, an upper residential architectural complex that included significant storage structures, and a lower one of terraces and plazas used for outdoor activities. Sector 2 was another residential area, with two large dwelling complexes separated by a plaza-like area. The stratigraphy of Units 4, 5, and 9 in Sector 2 showed an expansion of domestic occupation in this sector in the Late Lima phase. The domestic architecture in both of these sectors included significant patio and specialized storage spaces as part of the residential complexes.

In sum, my work revealed major change at Lote B in the Late Lima phase. Judged by scale of public architecture, these changes signal the emergence of Lote B as a compound-village site; a rural elite, third-order center in the Lima settlement hierarchy, below such centers as Pachacamac, Maranga, and Cajamarquilla. Such changes could mark the entry (through subordination or voluntary affiliation) of the Lote B elite into the Lima polity; the transformation of local leaders into intermediate elites. Or, if Lote B was already part of the Lima polity, the changes could mark a wider transformation in the political economy and integration of the Lima political system. As discussed in Chapter 2, there is evidence from survey and other sites for regional-wide changes at the end of the Middle Lima phase.

It had been hypothesized (Earle 1972) that the emergence of the Lima state in the Late Lima phase was accompanied by increases in social stratification generally, including the emergence of mid-level privileged families that formed an “intermediate elite” in the Lima polity. The evolution of the Lote B site is consistent with this hypothesis, with the changes revealing of the elements of Lima intermediate elite political economy.

One of my research hypotheses was the very general proposition that as political integration developed in the Lima polity, rural leaders would have taken on new roles. If so, these new or expanded roles (ranging from economically managerial to ritual leadership) would likely be manifested in elaboration in residential architecture, as well as in the building of specialized, non-domestic architecture, such as storage and ceremonial facilities. The changes at Lote B support the latter supposition. I also hypothesized that the new strategies of intermediate elites would be economic in nature, particularly mobilization of surplus, rather than ideological activities, which would be concentrated at the larger ceremonial centers. Lote B provides support for the former part of the argument, but, while Lote B is obviously no Pachacamac, the latter part is hard to assess until there is more information available on the ceremonial components of the larger centers.

8.2 ELITE ACTIVITIES AND POLITICAL ECONOMY IN THE LATE LIMA PHASE

Another of the project’s research questions concerned the nature of the elite activities and political economy at Lote B. The changes at the site with the building of the Sector 3 and 4

public ceremony/storage contexts, and the inter-sector artifact assemblage differences, as discussed in Chapter 7, provided answers to these questions.

The Late Lima phase construction of the most labor-intensive, imposing, and specialized architecture at the site in Sector 3, and the specialized storage complex in Sector 4, indicates significant change in Lote B elite activities at roughly the beginning of the Late Phase. This change included new provision for architecturally defined public space (plazas) and restricted access space (both storage and ritual). The evidence for feasting in Sectors 3 and 4 supports the idea that the Late Lima phase saw growth in elite strategies involving public ceremony and serving activities. These changes also mark Sector 3 as likely to be the spatial nexus where - - through the elite residents of Sectors 1 and 2 - - the population around Lote B connected with the overarching political and ideological structures of the Lima polity.

The construction of the specialized storage facility in Sector 4, with its yellow color (the characteristic color of public architecture in the Lima polity), represents a novel and increased level of storage practices by the Lote B elite. The residents in Sector 1 already maintained appreciable storage capability within their domestic architecture of that sector, and this continued in use after the construction of the Sector 4 building. That this storage capacity was invested in a separate building, rather than in the residential sectors of the site, can be interpreted as reflecting the emergence of surplus mobilization based on new forms of social interactions or power relations. While we cannot be sure that production in the valley intensified in the Late Lima phase, or that the building was entirely devoted to storage of agricultural products, the Sector 4 building likely marks the emergence of surplus mobilization and staple finance as critical elite activities in the Late Lima phase.

Artifact assemblages from excavations in the four sectors were used to assess stylistic preferences, and identify differences in activities within and among the sectors. As presented in Chapter 7, the assemblages clearly indicate the functional differences between the residential sectors (Sectors 1 and 2) and the non-residential ones (Sectors 3 and 4).

Non-domestic midden deposits with high densities of pottery, including serving vessels, are evidence for intensive consumption activities in Sectors 3 and 4, as exemplified in Unit 13, the Sector 3 excavation in a central patio area of the Yellow Building. There are a number of reasons this deposit can be interpreted as the residue of feasting. The deposits had much lower density and much less diversity in food plant taxa, lower densities of lithics, and higher proportions of bowls, when compared to the domestic middens in Sectors 1 and 2. Thus, the Sector 3 and 4 middens reflect intensive, but short term, consumption activities, without much accompanying evidence for food preparation tasks. Coupled with the public architectural context, this pattern is strong evidence for feasting, probably of stews or beverages prepared elsewhere. The midden of Unit 14, outside the storage building in Sector 4, differed from Unit 13 in subtle ways - in plants, lithics, and shellfish, (see Chapter 7) - suggesting a slightly different type of communal consumption.

Feasting was not limited to the non-residential sectors. Unit 6, in an outdoor terrace locus in the residential zone of Sector 2, represents an unordinary midden. The limited variety of plant and shellfish species suggests that it did not form from everyday food preparation/consumption activities, showing that special consumption activities or events were taking place in Sector 2 as well.

In terms of diet, I did not find evidence for any changes in plant usage (as seen in density

or taxa) from the Middle to the Late Lima phases, but shellfish consumption increased dramatically in the Late Lima phase.

8.2.1 A non-wealthy elite?

The size and degree of elaboration of the residence is a useful archaeological wealth indicator. Unfortunately, it is not possible to compare Lote B residences to excavated commoner dwellings, but based on my observations of commoner sites from the surface, I have no reason to doubt that the Lote B domestic units were much larger, made more use of stone, and were perhaps more elaborate (with plaster covered stone walls), than commoner houses. No conclusions can be drawn concerning how the wealth or status of the Sector 1 residents differed from that of Sector 2. The proportion of decorated pottery was the same in each sector in both the Middle and Late Lima phases, but there were some dietary differences. Sector 1 middens exhibited a much more diverse assemblage of plants (overall) and of food plants than did Sector 2. On the other hand, Sector 2 middens exhibited significantly greater quantities of shellfish.

Wealth accumulation is another common activity among elites, and so my research aimed at examining if Lote B residents were involved in the production or circulation of high-value craft and imported goods. Such materials can be used in faction building, to stimulate staple production, and to demonstrate the elites' special relationship to powerful institutions or esoteric realms. Generally, the assemblages from Sectors 1 and 2 exhibited higher proportions of decorated pottery than those of Sectors 3 and 4, indicating that use of decorated pottery was common in everyday domestic life, and that the decorated pottery of the site did not serve special display purposes in public or ceremonial contexts, including in the hypothesized feasting activities of Sectors 3 and 4. Notable for their virtual absence from the excavated assemblages

at Lote B were semi-precious stone, non-local shell such as *Spondylus*, metal objects, and imported pottery. With the exception of two pendant and two tapestry fragments, there were no exotic, non-local, or obvious luxury items found in my excavations. Nor was there much in the way of items of adornment, generally, such as beads. The grave goods in the burials encountered do not suggest that these luxury items were disappearing into mortuary contexts.

The lack of these materials in my excavations argues that Lote B residents were not particularly wealthy, were not highly involved in the circulation and display of luxury craft goods, and were not highly involved in exchange of sumptuary goods. I have not quantitatively compared Lote B to other sites in this regard, but if the residents *had been* involved in these activities to any significant degree, we would certainly expect to have found evidence for it in the extensive midden samples. From another perspective, the lack of such goods at a site with significant evidence for staple finance suggests that wealth finance did not play a large part in Lima polity economy.

8.3 FROM LOCAL LEADERS TO INTERMEDIATE ELITES

One of the common strategies engaged in by intermediate elites is that of emulation, of other, or of higher order, elites. If Lote B residents went from being local leaders to intermediate elites, then we might expect to see them adopt activities, architectural canons, or stylistic preferences shared with elites outside of the Lurín Valley, in domestic and/or public contexts. The most direct line of evidence for evaluating this process lies in the Lote B ceramic assemblages, and these do not suggest changes in activities at Lote B in the domestic sphere. There were no changes overall in ceramic stylistic preferences or vessel forms in the Late Lima phase. The

proportion of decorated pottery declined from the Middle to the Late Lima phase in Sector 1, but increased from Middle to Late Lima in Sector 2. Overall, the site wide proportion of decorated pottery did not change greatly, as might be expected if local elites began to engage into a new region-wide elite culture, or if they became incorporated into new elite exchange spheres. Nor were any fragments at all of non-local pottery recovered from excavation. The quantity of the highly decorated, Lima-style pottery at the site suggests that such pottery was not a scarce, economic commodity. Appreciable proportions of the Lima tradition pottery was recovered in every context at Lote B. As of yet, however, it is not possible to discuss the role played by such pottery in Lima political economy, or in status-building activities at Lote B. It is possible that the Lima pottery allowed the Lote B elites to display materially display their privileged status in interaction with commoners, while at the same time, the iconography on the vessels, and the relationships inherent in its acquisition, tied the Lote B elites into the larger Lima sociopolitical system.

Burial treatments provide another line of evidence, as treatment of the dead is both strongly governed by custom, but also a vehicle for materializing the social persona and signaling social identities and affiliations. Two distinct treatments co-mingled in these burials. The extended, cane-wrapped, with *mate* grave goods, pattern is a typical Lima pattern. Some of these burials may have been secondary burials. The flexed bundle burial with *mate* containers has long been viewed as a Wari or Middle Horizon, style introduction into the area (Jijon y Caamaño 1949; Stumer 1954; Kaulicke 2000; DeLeonardis and Lau 2004). Surprisingly in my excavations, these flexed burials were under a refuse deposition associated with Late Lima style ceramics. Therefore, we must consider the possibility that flexed burials date to earlier than originally proposed, and are not linked to Wari at all. Indeed, seated, textile wrapped bundle

burials are known from the Lurín Valley at least from the end of the Formative Period (Stothert and Ravines 1977; Makowski 2002; Pechenkina and Delgado 2006). Therefore, the shift to flexed burials could essentially represent the re-adoption of local (Lurín Valley) traditions, against regional (central coast) ones, or even the local survival of traditional burial practices even when the coastal extended tradition predominated (DeLeonardis and Lau 2004).

Where the affiliation with regional elite institutions is obvious at Lote B is in the Yellow Building made of small adobes in Sector 3, and the yellow storage building of Sector 4. The use of small, hand-formed mud bricks is also closely associated with politico-religious architecture, most notably in the Complex of the Adobitos or “little mud brick compound” at Pachacamac. Public buildings painted in yellow have been reported from other Lima culture centers, notably the Old Temple of Pachacamac (Shimada 1991; Franco 1993; Franco Jordan and Paredes Botani 2000), and at Maranga and the Huaca Pucllana in the Rimac valley (Flores 2005). For example, the main public building in Huaca Pucllana was painted yellow in its last phases of use. This building is held as archetypical of the political-religious architecture of the Lima culture, and the yellow color is argued to have been associated with elite political-religious activities (Flores 2005). The finding of fine tapestry fragments with Lima iconography (and tools for their production) in Sector 4 hints that such valuable objects were stored or exchanged there. The differences from other and earlier construction at the site, and the strong similarities to public architecture in the Rimac Valley, suggest not only a shift in the Late Phase of what the local elites at Lote B were doing, but also stronger ties (at least in public architecture stylistic preferences and thus public display) to the large centers of the Rimac Valley. In this sense, through the activities associated with the Yellow Building the intermediate elites at Lote B may have been acting as conduits of ruling ideology to subject, local populations.

8.3.1 No connections with Wari

How Wari sourced or Wari-style materials (including Nievería pottery) were distributed at the site was an important research question. Some scholars have emphasized the role played in Lima state formation by the Wari empire through direct subjugation by the Wari polity, through forming “clientage” relationships with Wari rulers, through emulation of Wari elites, or through local elite participation in exchange networks of ideologically-charged Wari prestige items. Therefore an important issue to resolve is whether or how Wari-style materials (including Nievería pottery) were utilized at Lote B. Lote B presented no evidence at all of contact with the highland polity, its institution, products, or ideology. The public architecture at the site does not follow Wari public architecture canons, and no Wari source (highland) pottery was found at the site. Only a couple of fragments of the “Wari-influenced” Nieveria style pottery were recovered from the site. The lack of this ware at Lote B may be chronological in nature, as some archaeologists have argued that Nieveria pottery did not appear in the Valley until Epoch 1B of the Middle Horizon, after Lote B’s abandonment. However, the preponderance of the evidence now suggests that the Nieveria style was contemporaneous with Late Lima style pottery, in which case the Lote B elites were choosing not to use it, and thus not stylistically affiliating themselves with the ideology or Wari connection that it represented. While my research does not preclude a role of interaction with the Wari polity at higher levels in the Lima settlement hierarchy, there is no evidence that developments at Lote B were in any way shaped by the growth of the Wari polity. My research confirms the the existence of social hierarchies in the area before the Middle Horizon Period (as proposed by Makowski 2002, contradicting Patterson et al 1982).

8.3.2 Dual power strategies at Lote B

As I argued noted in Chapter 1, intermediate elites in general are enmeshed in hierarchial ones - - above, or regional in scope, with primary elites, and below, or local in scope, with commoners. The strategies they pursue in each of these directions may be the isomorphic, or quite different. How these strategies relate to one another is at the core of understanding the dynamics of intermediate elite power. The evidence from Lote B can be used to formulate the following tentative scenario. A rural elite at Lote B initially based their privileged position within the community through ideological means, relying heavily on the management of small-scale ritual practices. With the Late Lima phase, local elite strategies were re-oriented towards economically driven activities (surplus mobilization), while at the same time participating in larger communal and Lima polity style activities (for example, in Sector 3). Any decrease in the independence of the local elites in the Late Lima phase was offset by the favored economic agenda, which, far from undermining their power, solidified a privileged position that now also drew legitimation from supralocal institutions. I suggest it is unlikely that the surplus accumulated at Lote B was moved on as tribute to higher order centers. Instead, the Lote B elites interaction with higher order elites may have been larger ceremonial or social. It did not seem to involve the flow of prestige goods. Seen from an agency perspective, the rise of the Lima polity in the Lima polity in the Late Lima phase provided an opportunity for local elites to change their relationships with commoners, shifting strategies into the economic domain by using the social imperatives in Lima public ceremony and feasting as justification for this shift.

Study of intermediate elite sites such as Lote B can help us to understand how complex societies are integrated, as well as the ways political, economic and cultural change cross-cuts societal levels. Intermediate elites - in forging relationships with primary elites, while also

maintaining control over the groups below them - face opportunities and challenges in negotiating their way through political orders, while their actions at the same time work to create new political orders.

8.4 FUTURE RESEARCH

The issues raised in this research can be investigated in the future by both refining analysis of the activities at the site, and by placing the results of the Lote B work into a broader, regional framework. In a future excavation project, I will focus on the study of burial practices at Lote B, to compare these practices with different phases in the occupation of the site, and with region wide political trends. As a working hypothesis, I propose that the economic improvement of Lote rural elite came at the cost of lost autonomy and previously used self legitimating ceremonies. One of such legitimization behavior could have been mortuary in nature, with the local dead being placed in close proximity to the elite compound. The covering up of the cemetery in the Late Lima by public architecture marks the end of this behavior. My future research will inquire as to what extent mortuary practices at Lote B were used (intentionally or not) as mechanisms of legitimization and communal integration.

A second research topic deriving from my dissertation research will be investigating the regional scenario. I will focus on how the footprints of the feasting activities discovered in Lote B are manifested at other levels of society. For example, it should be quite possible to compare the ceramics of Lote B with other two assemblages from Pachacamac and with Kroeber's collection from Maranga, looking to identify similarities and differences between assemblages in formal categories, manufacture technologies, and decoration. This comparison, in turn, will

allow me to discuss Lima social relations in terms of the three major axes - communication/ style, political economy, and political agency – of social relations.

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